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A
Compleat Body
OF
DISTILLING,
Explaining the
MYSTERIES
OF THAT
SCIENCE,

IN 12 Lf
A most easy and familiar Manner;

Containing an

Exact and accurate Method of making all the
COMPOUND CORDIAL-WATERS now in Use,

WITH

A particular Account of their several Virtues:

As also a

DIRECTORY

Consisting of

All the INSTRUCTIONS necessary for learning the
DISTILLERS ART; with a Computation
of the original Cost of the several Ingredients,
and the Profits arising in Sale.

Adapted no less to the Use of private Families, than of Apo-
thecaries and Distillers.

K In two Parts.

By G. SMITH, of Kendall in *Westmorland*.

L O N D O N:

Printed for BERNARD LINTOT between the Temple-Gates
MDCCXXV.

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Complete Body
OF
DISTILLING



A most complete and accurate
Description of the
Essays and Accurate Method of making all the
Compound Essences, Waters, and Lixives
As also
A particular Account of their several Virtues
As also
DIRECTIONS
All the most accurate and necessary for learning
the Art of Distilling, as well as Compound
of the several Sorts of Oils, and Logick
and the several sorts of
And also a full and complete Description of the
Necessaries and Instruments

In two Parts.

By G. Smith, of London.

LONDON:
Printed for BARNARD & LINCOLN, at the Sign of the
Anchor, in St. Dunstons Church-yard.



THE PREFACE.



WHEN first I undertook this work, I design'd to publish it without a preface; as judging that the truth and reason contained in it would be a sufficient commendation of themselves without any preliminary discourse whatsoever. I was sensible I had acted with faithfulness and care in the composition of it, and was willing to hope the usefulness of the subject might be a means to recommend the performance. But upon recollection, that all my readers would not be equally distinguish'd by a right sense of these matters, I chang'd my opinion, and have resolv'd to proceed in the common method.

The Book is divided into two parts, which comprehend the Practice and Theory of distillation. The first is design'd for a dispensatory for the whole-sale distillers, and contains an exact and accurate form of making up

P R E F A C E.

what they name their compound-goods. I have inserted nothing superfluous, nor omitted any thing of moment, which might be beneficial to the young artist. And thus I have endeavour'd, in the most easy and intelligible manner I was able, to explain to him, how to order his work-house to the best advantage, how to erect his Still, Worm-tub, Water-tub, Pump, Press, and other matters thereunto belonging. The several utensils are describ'd, and the manner of using them. And he is farther taught how to season the Still and Worm, and put them in a proper condition for working proof-goods; how to order the Still-fire, and draw off the liquors clean and to the best advantage; and when drawn off, how to dulcify and refine them, so as to make them become speedily fit for sale; with several other particular instructions, which are not necessary to be mention'd here, and are at large explain'd in the following treatise.

To make the work yet more compleat, I have added the prime cost, particular and totall, to every prescription, with the Profit arising from the said goods in sale. And tho' some, or indeed most of the ingredients us'd in distilling bear no standard or fix'd price, but rise or fall in proportion as the market is stock'd with them, yet taking one with another, the Balance will be found to be pretty even, and amount as near as may be to the respective sums I have here set down.

Tho'

P R E F A C E.

Tho' this Book is chiefly adapted to a whole-sale trade, and indeed of no considerable extent, the Still not exceeding thirty gallons, yet it may be equally serviceable to Apothecaries and persons of other employments, where distilling is a branch of their trade. For tho' the Apothecaries have a Pharmacopœia of their own to direct them in making their compound-waters, yet are the cordial-waters of the Distillers (which I speak without any disparagement to their Profession) much finer and pleasanter than what they usually make; and this seems owing to their great error in drawing off the faints with their distill'd cordial-waters. This inconvenience I have taught them to avoid, and if they'll once make trial of any of the distill'd-waters hereafter mention'd according to the directions I have given them, I am persuaded they'll find what I say to be true in fact, and that these waters will much exceed both in taste and colour the compound-waters of the same denomination, which are commonly made by them.

I farther hope my pains will not prove unacceptable to such persons of distinction, as keep a Still in their families for their own private use. As they generally proceed by prescriptions, which require a composition of ingredients of heterogeneous qualities, the compound-waters distill'd from them must necessarily be correspondent, and prove disagreeable both in their taste and nature. To prevent this ill consequence, I have taught

P R E F A C E.

them in an easy and familiar manner the best method of distilling and composing all cordial-waters, with very little trouble or loss of time, by reducing the quantity of the ingredients and spirits to the dimensions of their Still. And lest any error should arise from a mis-computation, I have also in the second part calculated them all for a still of three gallons charge.

As the former part of my performance is wholly practical, the second comprehends both the theory and practice joyn'd together, representing at one view the composition and virtue of such particular compound-waters. In this book the reader will find an account of several rich cordials, not mention'd in the first part, nor in any treatise of distilling extant, that I know of, besides the different methods of compounding other distill'd liquors, that are daily used. So that I may venture to affirm, I here give him the compleatest body of distilling, that has yet been publish'd. For tho' there have been many treatises written upon this subject, yet are they all of them highly deficient; and their deficiencies have been the grand inducement that has engag'd me to undertake the present Work, which I hope will prove acceptable to the candid and ingenuous, whose benefit I have chiefly studied. If any one is inclin'd to censure, I desire he would sit down and write better; I shall not envy his success, but shall be always thankful for any farther information.

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A
COMPLEAT BODY
OF
DISTILLING, &c.

BOOK I.

Double-Aniseed-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof spirits at 18 <i>d.</i> —	02	05	00
5 pounds of Aniseeds at 6 <i>d.</i> ———	00	02	06
9 pounds of fine Sugar at 6 <i>d.</i> ———	00	04	06
Coals and working —————	00	01	00
	<hr/>		
	02	13	00

For sale

30 gallons of double Aniseed-water, }
at 2 s. 6 d. } 03 15 00

ALL distill'd goods which are made proof, are call'd double goods, by what names or titles soever they be denominated, as Aniseed, Clove, Cinamon, or any other water: And if your spirits

spirits are of a good body, or what is call'd full proof, they may be made up with liquor or spring-water to the same quantity, with which you first charged your Still, suppose thirty or any other number of gallons.

You must put the Aniseeds into your Still immediately after your spirits, first gently bruising them in a Mortar, and drawing them off very moderately from your Still, with a slow fire, as long as the Goods will come off clear, which will be about two third parts of your first quantity, or near twenty gallons out of thirty gallons, first charged in your Still; and so proportionably for a larger or smaller quantity, which deficiency must be made up with liquor, which the goods will bear; or if you would have the goods very high proof, you may put a gallon of liquor the less, afterwards dulcifie the same with sugar, in proportion, and keep your faints which come off after your Goods by themselves, letting them run as long as they will burn, or fire on the Still-head, with a lighted paper or candle put to them.

You must carefully observe in drawing off this water, that the faints, or after-runings, come not off and run into your Cann along with your other goods. To avoid this Inconvenience you must often be viewing them in a glass or viol, especially towards the latter end of your distillation, for then your goods which before looked clear and limpid as Rock-water, will now put on, or turn to an azure or bluish colour (the reason whereof I shall give you, together with the virtue, in the second part) and if they were suffered to mix with your fine goods, would impart both a disagreeable taste and colour to them, which would require a long time in fining. Therefore whenever you perceive the colour to alter, shift
your

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your Cann, and place another under the end of your worm for the reception of the said faints; which must be kept separate from your proof goods; for such uses as hereafter shall be shewn in its proper place.

Single Aniseed-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 Gallons of proof malt spirits at 18 <i>d.</i>	02	05	00
8 Pound of Aniseeds, at 6 <i>d.</i>	00	04	00
14 Pound of brown sugar, at 2 <i>s. per C.</i>	00	02	07 $\frac{1}{2}$
Coals and working	00	01	00
	<hr/>		
	02	12	07 $\frac{1}{2}$
For sale	<hr/>		

45 Gallons of Aniseed-water at 2 *s.* 04 10 00

All common or single distilled goods are charged and drawn off from the Still, in the same manner as double goods, save what difference is made in the composition, and making up the said goods, *viz.* First draw off your goods from the Still into your Canns, you have for that purpose, putting them by as soon as they are full into your vessel designed to make up the goods in, then make them up to their first quantity with liquor; to which add one half more in liquor, over and above what your first quantity of spirits was, wherewith your Still was charged, *viz.* Every thirty gallon of spirits must be made 45 gallons of single Aniseed-water, by putting as much liquor to the goods drawn from the Still, as will make up that quantity; then dissolve the sugar in a Cann or two of your goods so made up, and stir and mix them very well together, with a proper instrument, and to make them be-

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come clear, put about four ounces of Alum finely powdered into them, stir them all well together, and in a little time the goods will become fine and fit for sale.

Common Aniseed-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof-spirits, at 18 <i>d.</i> —	02	05	00
10 pound of Aniseeds, at 6 <i>d.</i> ———	00	05	00
16 pound of Sugar, at 6 <i>d.</i> per C. w ^t —	00	03	00
Coals and working ———	00	01	00
	<hr/>	<hr/>	<hr/>
	02	14	00

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
50 gallons of Aniseed-water at 20 <i>d.</i>	04	03	04

When you would make a low priz'd commodity for wholesale business, always endeavour to let such goods have two or three months age before you expose them to sale; and because the spirits are lower, by having a greater quantity of liquor put thereto, you must add some more ingredients in lieu thereof, as above directed; and always when you draw off or distil Aniseed-water of any kind, beware you let none of the white faints run amongst your goods, and that for the fore-shewn reasons laid down in double Aniseed-water; therefore as soon as your Still has run about the quantity you expect, mind diligently when the goods begin to change their colour, then take away your Can, and substitute another to receive all the faints.

Single

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Single Angelica-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Spirits at 18 <i>d.</i> —	02	05	00
8 pounds of Angelica-seeds or 12 } pounds of roots	00	03	04½
14 pounds of ordinary Sugar at 21 <i>s.</i> } <i>per C.</i>	00	02	07½
Coals and working —————	00	01	00
	02	12	00

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
45 gallons of Angelica-water at 2 <i>s.</i> —	04	10	00

Ordinary Angelica-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Spirits at 18 <i>d.</i> —	02	05	00
10 pounds of Angelica-feed; or 14 } pounds of roots —————	00	04	02
16 pounds of Sugar at 21 <i>s.</i> <i>per C.</i> —	00	03	00
Coals and working —————	00	01	00
	02	13	02

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
50 gallons of Angelica-water, at 20 <i>d.</i> —	04	03	04

Directions about Angelica-water.

If you find any sale or demand for proof or double Angelica-water, you may follow the same rule or method, as in making double Aniseed-water, using the same quantity of Angelica-seeds as you do of Aniseeds.

The Angelica-water most in vogue or demand is as above directed, which the Still must be charg'd with

with, drawn off, and made up after the same manner with single Aniseed-water.

If you make Angelico-water, when the herb is growing, you may use the stalks, taking a sufficient quantity (which you will have for a small matter) instead of Angelico-seeds, or in case of necessity, you may use Angelico roots, first slicing them very thin into your Still, (they like the stalks are of small value) only put into your Still half as much more of roots well cleansed and washed, as you would do of Angelico-seeds; then having put to your spirits, and luted the junctures of your Still, draw off with a slow fire, dulcify and make up the goods as others of the like nature.

To improve English Brandy, and make it appear like French.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 Gallons of fine <i>English</i> brandy,	04	10	00
at 4 <i>s.</i> and 6 <i>d.</i> _____			
2 Ounces of Tinctura Japonica_____	00	01	00
6 Ounces of spirit of <i>Nitre Dulcis</i> , at	00	01	06
4 <i>s.</i> per pound -_____			
	<hr/>		
	04	12	06
	<hr/>		
For sale.	<hr/>		

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 Gallon of Brandy, at 8 or 9 <i>s.</i> per	08	10	00
gallon _____			

The chief and principal ingredient which operates most in improving English Brandy, and giving it the flavour of French goods, is the Tinctura Japonica; not made by Chymists after the manner that is fit for that purpose, without particular directions, and a very great charge to them to be just in the composition thereof, and then they not

not much to be depended on in the composition of it; therefore I have here inserted the true receipt as it ought to be made for this intention: and it is to be observed that it must be made so strong, as to make a strong reflection, or to hang upon the glass or Phyal in which it is put and kept for uses: at the same time you must have 1 pound or 2 pounds of spirit of Nitre Dulcis which is 4s. per pound, and mix 2 ounces of Tinctura Japonica with six ounces of spirit Nitre Dulcis, (as directed) very well incorporated together, and put to your Brandy and stirr'd or well romag'd therein, and you may sell it as soon as it is settled.

Tinctura Japonica.

Best English Saffron dissevered 1 ounce, Mace bruised 1 ounce. Infuse them in a pint of Brandy, 'till the whole tincture of the Saffron be extracted (which will be in seven or eight days Time) then strain it through a linen Cloth, and put to the strained tincture two ounces of Terra Japonica powder'd fine; let it stand to infuse, 'till the Tincture be wholly impregnated therewith.

To rectify Molossus Brandy.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
21 gallons of Molossus spirits at 2s.	02	15	01½
7d. ½ per gallon —————			
2 pounds of Flemish pot-ashes at 6d. ———	00	01	00
½ pound of Salt. of Tartar —————	00	00	08
4 pounds of Raisin stalks —————	00	00	03
Coals and working —————	00	00	08
	<hr/>		
	02	17	08½
	For		

For sale.

	l. s. d.	
20 gallons of Brandy at 5s. or 6s.	}	05 10 00
per gallon.		

You may use the same method in Moloffus Brandy as in fine Brandy, in the foregoing page; but it will be a much better commodity, if you first draw it over again in your Still very gently and with a flow fire.

*Directions in rectifying Moloffus
Brandy.*

Putting to the Spirits two pounds of Flemmish Pot-Ashes, half a pound of Salt of Tartar, and 4 pounds of Raisin-Stalks; and filling up your Still within a hand's breadth of the top, that the goods may the better cleanse themselves from all their impurities; and draw off your goods no longer than proof, whereby they will have a much better relish; and be sure to allow 1 gallon in 20 in making up your goods, which will be much finer and better by being full proof; and must not be reduc'd or lower'd with liquor (as common Moloffus and rectify'd Malt-Spirits, which will bear a pint to every gallon) because with a little age it will be a good commodity, and yield a good price.

To

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To rectify Malt-spirits.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at } 1 s. 6 d. per gallon. ————	02	05	00
Half a pound of Salt of Tartar ————	00	00	08
2 pounds of Sandiver powder'd ————	00	00	02
Coals, and working ————	00	01	00
	<hr/>		
	02	06	10

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
33 gallons three quarters of rectify'd } Spirits at 2 s. 6 d. per gallon. ————	04	04	04½

To make Salt of Tartar.

In rectifying Spirits, over and above the said ingredients you may add 3 or 4 pounds of Raisin-stalks, which gives a good flavour to the goods; (or they may be omitted without any prejudice) you may make your own Salt of Tartar, by taking Saltpetre and white Argill (or common Tartar) of each one pound, powder them, and sift them through a hair-sieve, put and mix them together in an earthen pot, that will endure the fire, and will hold thrice as much as the said Powders, then place the pot in a large open chimney, or rather in the open air, and heat an iron spatula red-hot, and put it into the earthen pot, stirring the powders with it, which will immediately deflagrate and calcine, so as to become but half the quantity; which must be kept in a gally-pot close cover'd with leather from the air, which otherwise would

B

melt

melt it: but being thus preserv'd, you may keep it 'till you have occasion for its use.

Note, that a pint of liquor is to be put to every gallon of proof Brandy, when it is made fit for sale.

Double red Clove-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at 1 s. 6 d. per gallon. —————	}	02	05 00
6 pounds of Clove-pepper at 9 d. —			
12 pounds of ordinary Sugar at 2 1 s. per C. —		00	04 06
4 gallons of Elder-juice —————		00	02 03
Coals, and working —————		00	03 00
			00 01 00
			02 15 09

For sale

	<i>l.</i>	<i>s.</i>	<i>d.</i>
32 gallons of double Clove-water, at 2 s. 6 d. per gallon. —————	}	04	00 00

Colouring of red Clove-water.

All red Clove-waters must be made as deep in colour as Claret-wine, which may be done with 2 pounds of Archill (such as Dyers use) put into a harden bag, and pressed out with your hands into a cann of the goods; dipping or steeping it amongst the goods, and pressing it as long and as often as any colour can be drawn from thence; which may be afterwards cast away: But the best and most wholesome way of rubifying Clove-water, is by making your Clove-water (before it be colour'd) about 2 gallons in 30 gallons above the

the first proof; then put thereto 3 or 4 gallons (according to the goodness or thicknes) of your Elder-juice, stirring and mixing it well together, and using more or less of the juice, as you see occasion; and afterwards dulcifying it, in proportion, or to your palate, as the juice is more or less acid; which done, put it into your vessel to clear and fine of it self: for into red goods the powder of Alum is not admitted.

There is another way of making double red Clove-water, which is thus done: put 30 gallons of Spirits into your Still, with half a pound of Cloves, and near half a pound of Clove-pepper well bruised; then draw off your goods gently, and prepare, against your Still come to work, 5 pounds of ground Sanders, and 2 pounds of red Archill mixed, and put 'em into your cann which is to receive the goods; and stir 'em up from the bottom, that the Spirits may extract the Tincture; and when it is full empty it, and set it under the worm-pipe again; still stirring up the ingredients, till they are all dissolved amongst your distill'd goods, which will run to about 20 gallons for every 30 gallons first put into your Still: then take 28 pounds of brown Sugar, and dissolve it in 12 gallons of liquor, which will make betwixt 14 and 15 gallons, and put it to the goods drawn from the Still, which together will be 35 gallons: being well stirr'd and incorporated, let it stand in an open-headed tub, with a cock in it till next day, when it will be clear, and may be drawn off, and put by for sale: All the fæces, or thick dregs at bottom, may be put into the flannel bag gradually, and filtred, or drawn off fine and clear, and then may be put into the hoghead amongst the other fine goods, and there be reserved for sale.

Red Clove-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at 1 <i>s.</i> 6 <i>d.</i> per gallon. ————	}	02	05 00
9 pounds of Jamaica-pepper at 9 <i>d.</i> ————			
18 pounds of ordinary Sugar at 2 <i>1s.</i> per C. ————		00	03 10
5 gallons of Elder-juice at 9 <i>d.</i> ————		00	03 09
Coals, and working. ————		00	01 00
		<hr/>	
		03	00 04
		<hr/>	

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
45 gallons of Clove-water at 2 <i>s.</i> ————		04	10 00

Directions for making Clove-water.

All Clove-waters, till of late years, were generally made of Clove-bark, or of Winter's bark, called Cortex Winterana; of the former one pound to every ten gallons double; or 15 gallons single: Cloves being 2*s.* or 2*s.* 4*d.* a pound: and the latter used accordingly at 8*d.* or 9*d.* a pound: but those Barks were, or became so great an abuse, by being distill'd whole, without bruising, and afterwards dry'd, cur'd, mix'd, and sold among better goods, that Distillers had recourse to Clove (which is also called Jamaica) Pepper, especially since it became so cheap, which has heretofore been 3 or 4 times the price it now is, which gives the goods an acceptable flavour: it may be also made with 1 ounce of Cloves to every 10 or 15 gallons of double or single Clove-water; which indeed makes the best goods, but
'tis

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'tis seldom made use of, because of its dearness: it must be colour'd according to directions of double Water, and dulcify'd, in proportion; wherein your own palate and experience will very much inform and improve your judgment.

Ordinary red Clove-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at 18 <i>d.</i>	02	05	00
10 pounds of Clove-pepper at 9 <i>d.</i>	00	07	06
20 pounds of ordinary Sugar at 21 <i>s.</i>	00	02	07½
<i>per C.</i> or rather 21 pounds of Trea- cle at 14 <i>s.</i> <i>per C.</i>			
6 gallons of Elder-juice at 9 <i>d.</i>	00	04	06
Coals, and working	00	01	00
	<hr/>		
	03	00	07½
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
50 gallons of Clove-water at 1 <i>s.</i> 8 <i>d.</i>	04	03	04

It is a principal point in the Distilling trade, to keep the kind of every ingredient an entire secret: for otherwise there are no distill'd goods so liable to common odium as Clove, especially ordinary Clove-water, which when dulcify'd with Treacle (being of a very deep colour) will require less Elder-juice for that purpose; wherein your own discretion must direct what quantity of colouring or dulcifying is most convenient, according to the goodness of your juices: these and all other goods whatever, reduced so low, must have two or three months to meliorate, and become palatable, before they be expos'd to sale.

No powder of Alum must be put into red goods, but you must let them settle and become clear of themselves, by placing your casks in such a manner as you will have no occasion to meddle with the same, lest they be disturbed and want to be resettled.

White Clove-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at } 18 <i>d.</i> _____	02	05	00
8 pounds of Clove-pepper at 9 <i>d.</i> _____	00	06	00
14 pounds of Sugar at 21 <i>s.</i> — <i>per C.</i> _____	00	02	07½
Coals and working _____	00	01	00
	02	14	07½

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
45 gallons of white Clove-water at } 2 <i>s.</i> _____	04	10	00

Directions for white Clove-water.

White Clove-water is so called, not that it is any whiter, or otherwise coloured than Aniseed, Angelica, or any other such like goods: but only to distinguish it from red Clove-water, which is most in demand in the Country, and the white Clove-water seldom called for, tho' in vogue at *London*. If you keep any by you, and find it not vendible, you may when you please, turn it into red Clove-water, by putting a proportionable quantity of Elder-juice to it, according to former directions prescribed in red Clove-water; but you must

must be sure to put a suitable quantity of Sugar, dissolved in the goods, to qualify the acidity or tartness of the juices; especially when the juices are old, which naturally become more acid; and your palate or judgment must direct you herein, by comparing the relish or taste of it with other such like goods of or about the same prices.

Double Cinnamon-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 gallons of rectify'd proof Spirits } at 20 <i>d.</i> —————	01	13	04
4 pounds of best Cinnamon at 8 <i>s.</i> 6 <i>d.</i>	01	14	00
14 pounds of Sugar at 66 <i>s.</i> <i>per</i> C. —	00	08	03
Coals and working —————	00	00	08
	<hr/> 03 16 03 <hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 gallons of double Cinnamon- } Water at 8 <i>s.</i> —————	08	00	00

Directions about double Cinnamon-water.

Cinnamon-water is very much esteemed all the world over, and is mostly enhanced in it's price and value by Apothecaries, who retail it at 16 *s.* *per* gallon: and in prescriptions at a much greater price, and is also retained by Distillers at or about the same price. This water is sometimes drawn from Moloffus Brandy, or from finer goods, and sold out at high prices to persons of nice palates and judgments, who scruple no price

for such a commodity. It is dulcified with loaf, and sometimes with double refined loaf Sugar; but what is sold by Distillers is generally drawn from rectify'd Malt-spirits: which by keeping a few months becomes wonderfully mellow and of an agreeable flavour, and the longer it is kept becomes the better, as do all goods that are of a good body: it is call'd double Cinnamon, purely to make it more valuable to the buyer: for it is a general rule, that all fine goods, which bear a good price and profit, are made proof; because goods reduced become foul and flegmatick,

Cinnamon-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 gallons of rectify'd Proof-spirits	01	13	04
at 20 <i>d.</i> _____			
2 pounds of small Cinnamon at 6 <i>s.</i> —	00	12	00
2 pounds of Cassia Lignea at 2 <i>s.</i> 4 <i>d.</i> —	00	04	08
21 pounds of Sugar at 52 <i>s.</i> <i>per C.</i> —	00	06	06
Coals and working _____	00	00	08
	<hr/>		
	02	17	02
	<hr/>		

For sale.

20 gallons of Cinnamon-water	06	00	00
at 6 <i>s.</i> _____			

Directions about second Cinnamon-water.

Whatever distinction is made, in the names of double, single, or ordinary goods, is chiefly for your own instruction and government, and not that

that you are to puzzle your customers with such terms of art: For persons of judgment will make the distinction themselves, in their enquiring for, and buying such commodities; or especially in their prices which they will readily give for such goods. But when you are enquired of for Cinnamon Water, or any other such like goods, whereof you keep two sorts or kinds, which bear a high price, you are always to understand their meaning for the cheapest sort of goods, and you are not to hesitate or speak doubtfully to them, as if you had any other, or better goods; which if they suspect or know, they'll not be pleased without; or at least will have a worse opinion of what they would otherwise not have scrupled.

You must bruise your Cinnamon and Cassia, before you put them into your Still.

Caraway-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits	02	05	00
at 18 <i>d.</i> _____			
6 pounds of Caraway-seeds at 20 <i>s.</i>	00	01	01
<i>per C.</i> _____			
14 pounds of ordinary Sugar at 21 <i>s.</i>	00	02	07½
<i>per C.</i> _____			
Coals and working _____	00	01	00
	<hr/>		
	02	09	08½
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
45 gallons of Caraway-water at 2 <i>s.</i> —	04	10	00

Di-

Directions for Caraway-water.

If you have a call for double Caraway-water, you may make it after the same manner with double Aniseed-water; only with the difference of the Seeds, by which the goods bear their names or denominations: As Caraway-water, made of Caraway-seeds; Aniseed-water of Aniseeds, and so of all others in like manner. You may probably meet with Caraway-seeds in the gardeners hands, as well as other things, which you will be capable of buying, by comparing the price demanded of you, with what the same cost here in the foregoing prescript.

The Sugar used in dulcifying all common or single goods, is the cheapest that can be bought, and by reason of its brownness gives the goods an Amber-colour, which is become agreeable enough through long usage.

But if you are to make goods of a lighter colour, you must use finer Sugar to dulcify withal, which will make the goods proportionably dearer, and must therefore bear a better price than high colour'd goods.

To make Cherry-brandy.

Cherry-brandy is made different ways, sometimes by pressing out all the juice in a press proper for Cyder, Cherries and such like goods; picking out all the stones, and selling them to Druggists, &c. to make Black-cherry-water with, who commonly give as great a price for the stones in proportion to what they weigh, as the Cherries first cost; and then casting away the pulp or
skins

skins of the Cherries, and putting as much Brandy to the juices so pressed, as the goods will bear. Which will be double or treble to the juice, according to the goodness of the juice: And 2 or 3 pounds of ordinary brown Sugar, must be added to every 20 gallons with half an ounce of Cloves and Cinamon beaten small, and put amongst every such quantity of Cherry-brandy, which may be vended in 2 or 3 Days, but will be abundantly better by longer keeping.

In *London* it is commonly made of old rectify'd spirits, and sold at 3 s. 6 d. or 4 s. per gallon: But according to the usual price of Cherries does not stand in one half part of the money. The best and most usual way of making Cherry-brandy, is to put your Cherries, being first clean pick'd from the stalks into a vessel, about half fill'd with the Cherries, and then fill'd up with Brandy, rectify'd, or rather Molossus; the latter being most used in the country, where Cherry-brandy bears a great price: And when the Cherries have been infused 12 or 14 days, you may draw off the goods by degrees, as your occasion requires, 'till all the liquid goods are drawn off at the first infusion; then fill up the vessel a second time near the top, and let it stand about 3 weeks or a month to incorporate with the Cherries, and draw off as you have occasion, 'till all be come off the Cherries: Then gage your Cask to compute what quantity of Brandy will a little more than cover the Cherries; which must be with Brandy drawn over anew in the Still, and made one fifth part stronger than proof; and put upon the Cherries to infuse 5 or 6 weeks, which by its strength will extract all the juice and virtue out of the Cherries; and when you draw it off for use, you must put to it a proportionable quantity of Liquor, as the Brandy was above proof: And afterwards the

Cherries must be pressed as long as any goods or Brandy is in them, and then cast away. When you make your Cherry-brandy of the first infusion, the juice will be best, and bear the most Brandy mix'd with it, 'till it be brought to as deep a colour, as to discern a candle lighted and held on the other side of the glass; and if you find it does not taste well of the Cherries, you may add a little more of the juice, as it's drawn off the first infusion, and then dulcify'd with 2 or 3 pounds of Sugar to every 20 gallons of goods, and in proportion for a larger or lesser quantity thereof, which by standing a little time, will be much more palatable than at its first being mixed or made up.

When you draw off your Cherry-juice or Cherry-brandy of the second infusion, it will be something inferior in goodness to the first, and will bear less Brandy in mixing or making fit for sale; and will require a little more Sugar to dulcify, and half an ounce of Cinnamon, and half an ounce of Cloves beaten, and put to twenty gallons of Cherry-brandy of the second infusion; as there must be half the quantity of Cinnamon and Cloves in each 20 gallons of the first infusion; and the longer you keep it, it becomes the better.

When you draw off your Cherry-brandy of the last infusion, you must not put any more Brandy to it, which it will not bear, but may add about a pint to a gallon of liquor, in consideration of the said third infusion being made with stronger than Proof-brandy, and dulcify and aromatize it with Cinnamon and Cloves, as order'd in the second infusion, or a little more if it be needful. What goods are pressed from the Cherries after their being thrice infused, will be of a little thicker body than the ordinary; therefore you may add a little Brandy if it will bear, and dulcify with Sugar, and dry spices as before directed,

rected, according to your quantity; and after it hath stood a few days to settle, it will become clear and saleable.

It is customary and practised frequently by most Distillers, to add a fourth or fifth part of Elder-juice to Cherry-brandy, as it is made up for sale: But it is much better, when about a proportionable quantity is put into your Store-cask, to incorporate with the Cherries and Brandy infus'd together; which quite alters and loses the flavour of Elder, and becomes perfectly good Cherry-brandy, to all intents and purposes; and if you were not privy to its being so mixed, you wou'd not imagine any such thing; but you are herein at your own liberty and choice whether to use, or to omit it.

Raspberry-Brandy.

Raspberry-Brandy is in less demand in the Country than Cherry-Brandy is; and is infused much after the same manner with Cherry-Brandy, and drawn off, and made fit for sale with about the same addition of Brandy to what you draw off from the first, second, and third infusion, and dulcify'd accordingly, first making it of a bright deep colour; but omitting Cinnamon and Cloves in the first, but not in the second and third infusion.

The first infusion will be of a colour deep enough without help or art to it; the second infusion will be somewhat paler, and must be made deeper colour'd, by adding Cherry-Brandy about a quart to ten, or more gallons of the said Raspberry-Brandy; and the third infusion will take more Cherry-Brandy to colour the Raspberry, which your own judgment will direct you in.

All other instructions are mentioned in making and compounding Cherry-Brandy.

Golden Cordial.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
11 gallons of proof Spirits rectify'd at 1 <i>s.</i> 8 <i>d.</i> per gallon. —————	}	00	18 04
4 pounds of Angelica-roots at 3 <i>d.</i> —————			
2 pounds of Raisins at 4 <i>d.</i> $\frac{1}{2}$. —————		00	00 09
1 pound of Coriander-seeds —————		00	00 01 $\frac{1}{2}$
half a pound of Caraway-seeds —————		00	00 01 $\frac{1}{2}$
half a pound of small Cinnamon —————		00	03 00
2 ounces of Cloves —————		00	01 08
half a pound of Melilot-flowers —————		00	00 06
1 pound of Figs —————		00	00 04
1 pound of Liquorice —————		00	00 08
8 pounds of Sugar at 2 <i>l.</i> 12 <i>s.</i> per C. —————		00	03 10
2 quarts of Rose-water —————		00	01 00
		<hr/>	
		01	11 04
		<hr/>	

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
10 gallons of Golden Cordial at 8 <i>s.</i> per gallon —————	}	04	00 00

Directions for golden Cordial.

Let your Angelica-roots and Liquorice be thin sliced, and your Raisins ston'd, and Figs cut in pieces, before you put them into the Spirits with your other ingredients: infuse them all night before you distil them, then draw off very gently with a slow fire, and no longer than proof; then take your fine Sugar, and dissolve in clear Spring-water,

water, with which you make it proof; adding the Rose-water to the liquor in which your Sugar is dissolv'd before you put it to the goods drawn from the Still, making the whole up to ten gallons, which must be colour'd with burn'd Sugar to a fine golden colour, and put it into a cask with a brass cock to it: let it stand 4 or 5 days, untill it be perfectly settled, and then draw off into another vessel in which you intend to keep it.

If you put any into a large shop-bottle for sale, put 3 leaves of gold well broken to pieces, and shaken well together, when you pour any out of your bottle.

Some in making of this golden Cordial, in lieu of the burn'd Sugar, give the Tincture with English Saffron (whereby the Cordial becomes exceedingly richer and better) to a fine citrine or golden colour, adding a portion of Alchermes (either in juice or confection) but as they are both very dear, are wholly omitted by the Distillers: yet upon the account of the virtues and richness of the flavour, which they impart thereto, I shall insert a Recipe thereof in the second part of this work.

Citron-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
11 gallons of proof Moloffus-spirits	01	08	10 $\frac{1}{2}$
at 2s. 7d $\frac{1}{2}$ per gallon			
$\frac{1}{2}$ C. of Figs at 1l. 4s. per C.	00	12	00
80 Lemon-peels thin sliced	00	01	06
10 pounds of double refin'd Loaf-	00	10	00
sugar at 1s. per pound			
Coals, and working.	00	00	06

02 12 10 $\frac{1}{2}$

For

For sale.

	l.	s.	d.
10 gallons of Citron-water at 10s. —	05	00	00

Directions for making Citron-water.

Let your Figs be the choicest that can be got, and slic'd, and infused all night in the Molossus-spirits, together with the thinnest skin or peel that can be par'd or taken off the finest and clearest Lemons: put about half the quantity (of the Spirits with which your Still is charged) of clear Spring-water into your Still along with the goods; and draw off your goods with a gentle fire, no longer than proof: then take as much Spring-water, as will make up the goods drawn off from the Still to proof, abating as much liquor as the Sugar when dissolv'd will measure to: put your double refin'd Loaf-Sugar into the said Spring-water, and set it upon a gentle fire until the Sugar be dissolved; then let it stand till it be fully cold: which must be then put to the goods drawn off, and well stirr'd together, and put into a proper vessel with a brass cock into it: and stand five or six days to become clear, and then drawn off into your cask you intend to keep it in.

Plague-water.

	l.	s.	d.
23 gallons of proof rectify'd Malt- spirits at 1s. 8d. —————	01	18	04
Ingredients, as below —————	00	10	00
Coals, and working —————	00	01	00
	02	09	04
	For		

For sale.

20 gallons of Plague-water at 8s.—

l.	s.	d.
08	00	00

The ingredients are { Rue, Rosemary, Balm, Carduus, Scordium, Mint, Marigolds, Dragons, Goats-Rue; of each 24 hand-fuls.

Roots of { Masterwort, Angelica, Butterbur, Piony, of each 3 pounds; Scorzonera a pound and half: price 10s. *ut supra*.

Directions in making Plague-water.

It is called Plague-water, because of its being a soveraign antidote or remedy against it, as against the Cholick, Gripes, Faintings, Ill-digestion, &c. and has a peculiar virtue to dispose one to sleep.

The best season to make it is in the month of June, when all the Herbs are at their first and full growth; because the second crop hath not the virtue and efficacy of the first: and it is meliorated by keeping: so that you must make as much then, as will serve for a whole year's sale: or if it be kept longer, 'twill be so much the better; as will all goods that are made high proof: as, Plague-water must be in a peculiar manner, because so great a quantity of Herbs and Roots does extremely lower, or reduce the body, or strength of your Spirits. Draw it off from your Still very gently, and no longer than proof. Be sure you make it, and all fine goods high proof; which causes them to be, and taste, far more clean, and agreeable to the palate.

Aqua Mirabilis.

11 gallons of proof Malt-spirits at	7		
1s. 8d. per gallon ————	00	18	04
Sage, Betony, Balm, Cowslip-flow- ers, Mint; of each 6 handfuls:			
Cubebs, Galingal, Ginger, Cal- amus Aromaticus; each 6 ounces.	00	07	06
Nuts, Cloves, Cardamom-seeds, each 2 ounces. ————			
Coals, and working ————	00	00	06
	01	06	04

For sale.

l. s. d.

10 gallons of Aqua Mirabilis at 8s.—04 00 00

Directions for Aqua-mirabilis.

This Cordial is properly enough called Mirabilis, because of its wonderful good qualities and effects; being preventive of Apoplexies, Convulsions of the nerves, and Palsies; strengthening the heart and stomach against Faintings and Coldness there: and because of the great variety in mens palates, it is sometimes made plain, and sometimes dulcify'd with fine Lisbon-Sugar (or rather double refined loaf) half a pound to every gallon, and set in an open-headed cask with a cock in it, 'till it become clear; and then put by into your cask for sale.

Apothecaries, Druggists, &c. make it without Herbs, or with very few, according to their Pharmacopœia; and according to their usual
8 custom,

custom, decry all that prepare it otherwise: but their objections are of small force.

You must (as I before hinted) never discover what ingredients you use, or do not use: for all such mysteries are to be a profound secret, and neither assert, nor deny, whether this, that, or the other ingredients be made use of.

Hungary-water.

7 gallons of proof rectify'd Malt-	}	00 10 06
spirits at 1s. 6d. ————		
12 hand-fuls of Rosemary and La-	}	00 01 06
vender-tops ————		
		00 12 00

For sale.

		l.	s.	d.
6 gallons of Hungary-water at 5s.—	01	10	00	

Directions for making Hungary-water.

The Queen of Hungary's Water (so called) is best made in the summer-season, when the ingredients are at the best: the thickest of the stalks are to be cut off, and cast away; and the other to be put into the Still, drawing no longer than proof; and it must be made high proof for sale: it is usually put up and sold in long phials purposely made for the same; and a title put upon each bottle in French, Italian, or some other foreign language; and sold at 3, 4, or 6s. a dozen; and retail'd at double and treble prices: the bottles are as valuable as the goods, and the titles cost but a small matter, being sold at 9d. a

quire; and every sheet has abundance of titles upon it, which are put upon the bottles with a little starch or paste.

It is very much in request amongst the Gentry, who pay well for it; and being good proof will be the better for keeping; and the bottles must be well cork'd.

Your stock in hand will be best kept in large bottles.

Lemon or Orange-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 gallons of rectify'd Spirits at 1 s. 8 d. a gallon —————	} 01	13	04
6 pounds of Lemon or Orange- peels dry'd —————			
7 pounds of Sugar at 2 l. 12 s. per C.	00	03	03
Coals, and working —————	00	00	06
	<hr/>		
	01	19	01
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 gallons of double Orange or Lemon-water at 4 s. per gallon. —	} 04	00	00

Directions for Orange-water, &c.

Lemon-water is not near so much in request as Orange-water, nor indeed is it so pleasant or grateful to the palate as Orange: they are not much known, or used in the country: but the agreeable relish, or flavour thereof, will make it much preferable to the double or single Anni-feed, Clove, Angelica, or such like goods: I mean

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mean Orange, especially double Orange, which is fold much dearer than other such like goods; purely to get an opinion in the buyer, that it is a more rich and valuable Commodity: and the more to keep up its reputation, as well as the temptation of a greater profit thereby.

The skins or peels must be all of the Sevil, and none of the China Oranges; and must be kept very dry, or they will grow damp and putrefy'd, and not fit to be used.

If you buy or procure green Orange-peel, you must spread it very thin in a dry chamber, and turn it oft, and not put it by for use, 'till exceedingly well dry'd.

To make Punch.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
8 gallons of proof Moloffus-spirits	01	01	00
at 2 <i>s.</i> 7 <i>d.</i> $\frac{1}{2}$ per gallon. ———			
10 gallons of liquor ———	00	00	00
1 gallon and a quarter of Lime-juice	00	02	06
at 2 <i>s.</i> per gallon. ———			
half an ounce of Ifing-glass — — —	00	00	02
6 pounds of Sugar at 2 <i>l.</i> 12 <i>s.</i> per C. —	00	02	09
	<hr/>		
	01	06	05
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 gallons of Punch at 2 <i>s.</i> 6 <i>d.</i> ———	02	10	00

Directions in making Punch.

When you are to make Punch, the preceding day before you make it, take half an ounce
C 3 of

of Ifing-glass, beat it all to pieces in a mortar, or with a hammer: then infuse it in a pint of Lime-juice for 24 hours: then put a pint more of the juice to that which is infused, which will be all in a jelly: take a small white-wand-whisker, and put it into what your forcing is in, and brew it; viz. rub or rowl the whisker with both your hands in the jelly, till it become all in a froth; then strain it forcibly through a coarse harden cloth, and cast away what stays behind in the cloth, and set by your forcing; then put the gallon of juice into a clean open tub, dissolve your Sugar in it; then put to the 10 gallons of liquor, and stir all well together, which is called Shirbeck: after that add to your Brandy; and last of all, the forcing: all which being well stirr'd together, may be put into the vessel it is to be kept in; and next day it will be fit to drink.

Mint-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 gallons of proof Malt-spirits at	01	10	00
1 <i>s.</i> 6 <i>d.</i> —————			
6 large hand-fuls of Mint —————	00	00	06
9 pounds of Sugar at 1 <i>l.</i> 1 <i>s.</i> per C. wt.	00	01	08 $\frac{1}{4}$
Coals, and working —————	00	00	08
	<hr/>		
	01	12	10 $\frac{1}{4}$
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
50 gallons of Mint-water at 2 <i>s.</i> ———	03	00	00

Directions

Directions for Mint-water.

Mint-water may perhaps not be in any great demand in the country: but upon recommending it, as well from the novelty, as the pleasantness of the commodity, you may meet with sale enough for it, especially in great and populous towns, where a far greater variety of all distill'd goods are call'd for, than in small villages, where commonly the most known and vulgar liquors are made use of.

If any double Mint-water be demanded, you may make it as you do other distill'd goods (double I mean): but remember that double goods must have finer Sugar to be dulcify'd with than single goods, which makes them more fragrant to the taste, and more beautiful to the eye: and your customers must not know but all double distill'd goods so call'd are twice distill'd, or drawn over from your Still.

Lime-juice.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
5 gallons of liquor	00	00	00
5 dozen of prick'd Lemons at 6 <i>d.</i>	00	02	06
2 ounces and half of Spirit of Vitriol	00	00	07½
	<hr/>		
	00	03	01½
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
5 gallons of Lime-juice at 2 <i>s.</i> 6 <i>d.</i>	00	12	06

Directions for making Lime-juice.

Lime-juice, according to these directions, is said to be unwholesome; but that may be from prejudice against Vitriol, which is known by all the practitioners in Physick to be a most wholesome and safe medicine; and that for its numerous virtues, which I could here enumerate; therefore that is an error grounded on no reason. When you make the liquor for Lime-juice, you may take double the quantity of water you intend to make of juice, and put 3 or 4 pounds of Lime-stone to it, and stir it about 'till the Lime be dissolv'd, and let it stand 'till next day: then pour off gently as much as is the quantity you intend for juice, which will be very clear: and to every gallon of liquor, or Lime-water, add one dozen of prick'd Lemons thin slic'd, and all the decay'd part first cut away: and let them be often well stirr'd, and infus'd till next day; then strain off all the goods, which must stand till they be clear, and drawn into a vessel to keep for sale or use; adding to every such gallon of goods half an ounce of Oil or Spirit of Vitriol to be incorporated therewith, by drawing a gallon or two into a Can, and mixing the same now and then with the whole quantity.

The common and usual proportion of Lime-stone used in this and other distill'd Goods, is about a pound to a gallon, or 5 quarts of water; which stir well about 'till the Lime-stone be dissolv'd: let it stand all night, and then pour off the clear liquor for use.

Ratafia.

Ratafia.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
10 gallons of Moloffus Brandy at } 2 <i>s.</i> 7 <i>d.</i> $\frac{1}{4}$ —————	01	06	03
5 pounds of Lisbon Sugar — — —	00	13	01 $\frac{1}{2}$
$\frac{1}{2}$ pound of Nuts at 12 <i>s.</i> per pound —	00	06	00
5 pounds of bitter Almonds at 10 <i>d.</i> —	00	04	02
10 grains of Ambergrease at 3 <i>d.</i> —	00	02	06
	02	02	00 $\frac{1}{2}$

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
10 gallons of Ratafia at 8 <i>s.</i> ———	04	00	00

Directions for making Ratafia.

Ratafia is not much in demand, save in some particular places where it has gain'd a great Reputation: and where to make it more vendible, the vender oft-times pretends to be run out; that it comes from the Isle of Man, and is not to be had without much difficulty, purely to make the buyer the more to value and esteem it, and to buy the more at a time, lest a supply were not to be had when there should be most occasion.

You must bruise in a mortar the bitter Almonds and Nuts, and then put them into your Brandy; and let your Ambergrease be well mix'd into the Lisbon, or finest moist Sugar; which must be all infus'd together in the Brandy 5, 6, or 7 days together, oft-times stirring up the same: and when you find it to taste well of the ingredients, strain, or pour off the Brandy from the ingredients; and let it stand in another vessel with
a cock

a cock in it; and when it is fine, put it into your cask wherein it is to be kept.

Cyder.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
14 pounds of Malaga-Raisins at } 24s. per C. _____	00	03	00
6 gallons of liquor _____	00	00	00
	<hr/>		
	00	03	00
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
6 gallons of Cyder at 2s. _____	00	12	00

Directions for Cyder.

You need not pick the stalks from the Raisins, but wash them in 4 or 5 waters, until the water run from them very clear: then put them into a clean open-headed cask, and put to them 6 gallons of liquor that will bear Soap, and cover it very well up; and let it stand 10 days: then draw it off from the fruit into another clean vessel, having a brass cock in it; and in 3 or 4 days time it will be clear, and fit to be drawn into bottles, and in 7 or 8 days more it will be fit for drinking.

But as there is a duty upon Cyder, you must not make any for sale, but for your own and family's use: and to avoid all manner of umbrage, you may give it any other name, when you treat your friends with it. And when your goods are all drawn off, let your Raisins stand or remain dry in the cask, to become acid in 14 days for Vinegar.

Surfeit-

Surfeit-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
11 gallons of rectify'd Malt proof } Spirits at 1 s. 8d. ———— }	00	18	04
Ingredients, as below, from the Gardiner	00	03	04
——— from the Druggist and Grocer	00	03	02
	<hr/> 01 04 10 <hr/>		

Herbs from the Gardiner { Centuary, Marigolds, Mint, Rose-mary, Mugwort, Scordium, Rue, Carduus, Balm, Dragons, St. John's wort, each 8 handfuls. } 00 03 04

Roots { of Angelica, Butterbur, Piony, Scorzonera; of each a pound and half. — }

from the Druggist and Grocer { Calamus Aromaticus, Galingal, Angelica-seeds, Caraway-seeds, of each 4 ounces: Ginger 2 ounces, red Poppy-seeds 2 ounces, 6 pounds of Sugar at 4 d. per pound } 00 03 02

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
10 gallons of Surfeit-water at 8 s. —	04	00	00

Directions

Directions for Surfeit-water.

You must endeavour to make your Surfeit-water for your whole year's sale, when the Herbs are at their prime growth, bruising your spices or seeds, and cutting your Herbs, and mixing all well together, before you put them into your Still, that one thing may not be predominant over another, but all be duly qualified, and one ingredient proportionable in taste and flavour with another; and it must be drawn off no longer than proof, and made up and dulcify'd in an open-headed tub, to stand 5 or 6 days to become fine, and then to be put into your cask for use.

If your customers desire it of a red colour, which some do, and some do not, the finest and noblest way of colouring it red, is to take one ounce of Cochineal bruised, put into a linen-cloth, and hang it at the end of your worm, when you distil the goods, and by running through the cloth it will extract all the tincture: but an easier and cheaper method is by putting some Cherry-juice or Brandy to the goods, which will give it a delicate colour.

Dr. Stephens's water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
11 gallons of rectify'd proof Malt- spirits ————— }	00	18	04
Ingredients as below —————	00	10	04
	<hr/>		
	01	08	08
	<hr/>		

Thyme,

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Thyme, Mother of Thyme, Sage,	}	l.	s.	d.
Pennyroyal, Pellitory of the wall,				
Rosemary, Red-roses, Chamomile-flowers, Origanum, Lavender, Mint, of each 4 handfuls				

Ginger, Galingal, Cinnamon, Nuts,	}	l.	s.	d.
Aniseeds, Caraways, each 2 ounces				

5 pounds of Sugar at 8 d.	}	l.	s.	d.
2 Leaves of gold in every gallon as you make it fit for sale				

	}	l.	s.	d.

00 10 06

For sale.

10 gallons of Dr. Stephens's water at 6 s.	}	l.	s.	d.

03 00 00

Directions for Dr. Stephens's water.

It will be the best season to make Dr. Stephens's water (which is in great demand in London) in June or July, when herbs are at their full prime, and must be drawn over, with a very moderate fire, and no longer than it is proof; and as all other fine goods, it will be abundantly better for keeping, after it is made up, and dulcify'd with fine Sugar: Let it stand 5 or 6 days in an open-headed vessel, with a brass cock in it, and when it is perfectly fine, draw it off gently into the cask you intend to keep it in all the year: But forasmuch as you must have standard bottles for keeping and selling small quantities of Dr. Stephens, and other fine cordial Drams, you must when you fill your standard Bottles of Dr.

Stephens's water put to every gallon thereof 2 leaves of gold, dislevered with the feather end of a quill, and shaken well up, when you pour out any for sale; some few Persons chuse to drink it, and other fine cordials undulcified.

Fine Usquebaugh.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
5 gallons of proof Moloffus spirits } at 2 s. 7 d. $\frac{1}{2}$ _____	00	13	01 $\frac{1}{2}$
6 gallons of proof rectify'd Malt } spirits at 20 d. _____	00	10	00
Mace and Cloves each one ounce } and a half _____	00	03	09
Nutts 4 ounces and a half: _____ } Cinnamon 3 ounces _____	00	05	01 $\frac{1}{2}$
Coriander-seed, Ginger, each 3 ounces	00	00	03
Cubebs 1 ounce and half _____	00	00	04 $\frac{1}{2}$
Raisins 4 pound $\frac{1}{2}$ _____	00	01	06
Dates 3 pound _____	00	04	00
Liquorise 2 pounds $\frac{1}{4}$ _____	00	01	06
Best English Saffron 4 ounces and } a half _____	00	11	03
10 pound Lisbon Sugar at 7 d. $\frac{1}{2}$ _____	00	06	03

			02 17 01 $\frac{1}{2}$

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
10 gallons of fine Usquebaugh at } 20 s. per gallon _____	10	00	00

Dire-

Directions in making fine Usquebaugh.

Charge your Still with the Brandy, Mace, Cloves, Nutts, Cinnamon, Coriander-seeds, Ginger and Cubebs, adding 5 or 6 gallons of liquor, and draw off your goods very gently, and no longer than proof; and against your Still comes to work, prepare ready the English Saffron, well dissevered and put into a linen cloth, and hung at the worm's end; whereby all the goods running through the Saffron (which must be oftentimes turn'd over and over) all the tincture will be extracted, and run amongst the distill'd goods.

In the interim take the Raisins and Dates and stone them, and scrape the Liquorise, and slice them all very thin, and put 'em into an earthen pot, with three gallons of liquor, and covered with thick cap paper, and set to stand in a moderate oven 5 or 6 hours; then let it stand 'till it be fully cold, and strain it into the goods drawn from the Still, and with liquor make up the ten gallons wanting from the Still, dissolving your Sugar therein, and add it to your goods, which when well mix'd together must stand 8 or 10 days in a cask with a cock in it, to become clear, and then put into your cask for sale.

Usquebaugh.

Usquebaugh.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
11 gallons of rectify'd Proof-spirits —	00	18	04
Nutts 2 ounces —	00	01	08
Cloves 2 ounces —	00	01	08
Cinnamon 2 ounces —	00	01	02
Aniseeds 4 ounces —	00	00	02
Caraway, and Coriander-feed each $\frac{1}{4}$ } pound —	00	00	01 $\frac{1}{2}$
Liquorise $\frac{1}{2}$ pound —	00	00	04
6 pounds of Sugar at 32 s. per C. —	00	01	09
English Saffron 2 ounces —	00	05	00
Coals and working —	00	00	06
			<hr/>
			01 10 08 $\frac{1}{2}$
			<hr/>

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
10 gallons of Usquebaugh at 6 s. —	03	00	00

Directions for Usquebaugh.

When you make fine or common Usquebaugh, be sure you bruise all your spices and feeds before you put them into your Still, and draw off no more from your Still than proof goods, as is, or must be, a constant and standing rule in making all manner of fine goods; and your Liquorise must be also sliced or bruised; and against your Still come to work, you must have ready your Saffron, rubb'd or pull'd to pieces (call'd properly disseveration) and put it into a large linen cloth, and hang it at the end of your worm, to receive all the goods as they come from the Still,

Still, and so drop into your Can, often turning and teasing the Saffron, that the goods may the better extract all the tincture: If any thing be left in it, take a pint of liquor, and put the Saffron to it in an earthen pot, that must simmer an hour over a gentle fire, and press all the virtue that remains into the goods, dissolve your Sugar, which makes your goods proof, and let it stand two or three days to be cleared for sale.

Vinegar.

	l. s. d.
3 or 4 gallons of liquor —————	00 00 00

For sale.

	l. s. d.
3 gallons of fine pale Vinegar at 12 d.	00 03 00

Directions for making Vinegar.

When the Raisins, of which your Cyder was made, have remained dry in the vessel for fourteen days to become sour or acid, from the time your Cyder was drawn off; then put of the same liquor, of which your Cyder was made, as much as will cover the Raisins and appear at the top of them; and let it stand fourteen days infusing, in which time it will become smart vinegar; and may be then bottled off, being fit for use, and the longer it is kept, 'twill be the better. Cast away the Raisins, where the gager may not take notice of them, lest he suspect your using them in an illegal way, as in rectification, &c. which is prohibited under a severe penalty; nor are you to sell

D

the

the vinegar so made, because it is subject to a duty, but what you make for your own use is not cognizable by any officer.

To make Elder-juice.

When you make Elder-juice let your berries be fully ripe, and all the stalks (which are very many) be clean picked from them; then if you have a press for drawing all the juice from them, have ready four or five hair Cloths, somewhat broader than your press, and lay one layer above another, having a hair cloth betwixt every layer, which must be laid very thin, and pressed first a little, and then more and more, till your press be drawn as close as you can; then take out the berries, and press all you have in the like manner; then take pour pressed berries, and break out all the lumps, and put them into an open-headed vessel, and put upon them as much liquor as will just cover them, and let them infuse so for seven or eight days, and put your best juice into a cask proper for it to be kept in, and put one gallon of Malt-spirits not rectified to every twenty gallons of Elder-juice, which will effectually preserve it from becoming sour for one or two years at least: I mean your Elder juice of the first drawing.

In *London*, where Elder-berries are scarce and dear, they are infused in liquor as above, and pressed a second time after the lying in the said liquor seven or eight days, and pressed after the same manner as the former, and the liquor put into a cask by itself; and one gallon and a half of Proof-spirits put to every twenty gallons, and proportionably for a greater or lesser quantity, which by standing some months becomes a pretty good commodity.

But in the country where Elder-berries are plentiful and cheap, a press is not always made use of, but an open-headed vessel like a mashing tub, with a large hole at the bottom and a piece of brick laid upon it; and the Elder-berries press'd with your hands into a pulp, and cast into the said vessel, and the juice will run through the hole at the bottom into a trough, or any other thing set under to receive it, and the berries are press'd no otherwise.

Colouring for Brandy.

There are divers ways of colouring Brandy, according to the several fancies and humours of countries and customers; for Brandies first made are as clear as liquor, and grow or become higher coloured by long keeping: But are artfully and speedily made of any colour by several ingredients; as for instance,

To make Brandy of a light straw colour; half a pound of Turmerick powder dissolved in a Can of spirits or Brandy, and put into the whole piece of goods and stirred well together will colour the whole piece.

Another more usual way is to compute what quantity you have to do, and put three quarters of a pound of Treacle to every twenty gallons of Brandy, and more or less to every larger or lesser parcel, dissolving the Treacle in a little of the Brandy in a Can, or any convenient vessel, and putting it to the whole quantity; which like the leaven in a lump communicates it self through the whole.

But the best and most celebrated way of giving an immediate colour or tincture to Brandy, is by having always by you a quart of burn'd Sugar

of the consistence of Treacle; (or syrup of Elder may in lieu of it be substituted) which gives an admirable colour to the goods, and may be made deeper or lighter, by putting more or less there-to as you see occasion, and putting it into the whole quantity you intend to colour.

To make a light bright red.

When you have occasion for this colour, you must take two pounds of red Sanders, and one pound of red Archil well mixed together, and put it to four gallons of proof Malt-spirits; which by a gentle heat dissolve, or extract all the tincture, continually stirring it all the while of the solution or extraction of the said tincture; which done, strein it whilst warm through a coarse cloth or hair sieve, and if you find it necessary you may add or put in four or five pounds of Sugar at the first infusion.

A quart of this mixture, or infusion, will colour six or eight gallons of other goods as you have occasion.

Alkanet-root imparts a beautiful red colour to any spirituous liquid; and that immediately, by only a simple and cold infusion; without communicating any disagreeable taste or smell there-to: Which by age inclines to a bright golden or amber colour.

Syrup

Syrup of Elder.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
1 gallon of Elder-juice —————	00	01	00
8 pound of fine Sugar at 6 <i>s.</i> 6 <i>d.</i> } per C. —————	00	04	01 $\frac{1}{2}$
	00	05	01 $\frac{1}{2}$

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
12 pound of Syrup-elder at 12 <i>d.</i> ———	00	12	00

Directions for Syrup of Elder.

When you make your Syrup of Elder, you must first put your juice into a brass pan &c. that will hold twice as much, and set it upon a clear but slow fire, adding the white of an Egg (beaten up to a froth) as soon as it begins to boil, skim it as long as any skim appears upon the top of it, then put (to the said clarified juice) your Sugar, which is one pound to every pint of juice; and let them boil very moderately together 'till it come to a proper consistence, which is known by dropping a little upon your nail; and if it stand thereon, without spreading it self farther, it is enough: Let it stand till it be fully cold, and then put it into glass bottles, cover'd only with paper, pricked full of holes, and so kept for use.

Wormwood-water.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at } 18 <i>d.</i> _____	02	05	00
10 pound of dried Wormwood _____	00	00	08
5 pound of Sugar at 21 <i>s.</i> per C. _____	00	00	11
Coals and working _____	00	01	00
	<hr/>		
	02	07	07
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
45 gallons of Wormwood-water } at 2 <i>s.</i> _____	04	10	00

Directions for making Wormwood-water.

Wormwood-water is in good demand in the Country, being sold and made use of, simply and purely by it self.

But in *London* it is commonly drunk with other goods, by putting a small and inconsiderable quantity of it amongst other liquors, which receive a particular flavour and agreeable relish thereby.

There is no certain rule for the quantity of Wormwood; because Wormwood that is very dry, and shaken, or removed from place to place, will lose most of its seed, wherein its strength lies; and besides persons palates differ so much (as one man's meat is another's poyson) that your own discretion and experience will direct you, after you have once or twice follow'd the prescription as above directed.

And

And you must remember at the season of the year, to procure as much as will serve for a year's use; and dry it perfectly well by hanging it on lines, and then lay it by for use.

Spirits of Wine.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 gallons of proof Malt-spirits at } 18 <i>d.</i> —————	01	10	00
6 pounds of Bay-salt at 2 <i>d.</i> $\frac{1}{2}$ ———	00	01	03
Coals and working —————	00	02	00
	<hr/>		
	01	13	03
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
10 gallons of Spirit of wine at 6 <i>d.</i> ———	03	00	00

Directions for making Spirit of wine.

When you make spirit of wine charge your Still not only with double the quantity of spirits, to what you intend for Spirit of wine, but a few gallons more of Spirits, as four, five or six gallons; that the bottom of the Still may not be burned: (*viz.*) charge your Still with twenty four gallons, (in lieu of twenty and put thereto two pounds of Bay-salt, which will of it self dissolve in the Still; draw it off gently, till the colour of the goods change, which will be about two third parts of the goods (*viz.* sixteen gallons; then draw off the faints, and put them amongst the other faints; damp your fire, empty your Still, and charge it again with the rectify'd Spirits new drawn off, and free from faints; and put other

two pounds of Bay-salt thereto, and lute up your Still again, and draw it off with a very gentle fire; and when the proof's gone, put what is left in the Still amongst your faints; damping your fire, and charging your Still again a third time with no more than your strong goods, last distill'd; to which add the last two pounds of Bay-salt, and so lute up your Still very well, and take a special care in drawing it over a third time, lest any candle should set it on fire (and endanger the burning of your Still-house &c.) and let your fire be so slow, as the goods may run like a small thread: And when as much is come off as makes up the quantity you intend to make, damp or extinguish your fire immediately; and put all the goods together, stirring and mixing them very well; and emptying what's left in the Still, and using it for common waters: And for proof of your Spirit of Wine, put a little Gun-powder in a spoon, which fill up with Spirit of Wine, then set the Spirits on fire, and if they be perfectly deflegmated they will burn dry, and blow up the Gun-powder.

Royal Geneva.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at } 18 d. —————	02	05	00
7 pounds of Juniper-berries at 3 d. —	00	01	09
Coals, and working —————	00	01	00
	02	07	09

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of Royal Geneva at 2 s. 4 d. —	03	10	00
			<i>Best</i>

Best Geneva.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at } 18 <i>d.</i> —————	02	05	00
8 pounds of Juniper-berries at 3 <i>d.</i> —	00	02	00
Coals, and working. —————	00	01	00
	<hr/>		
	02	08	00
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
35 gallons of best Geneva at 2 <i>s.</i> —	03	10	00

Geneva.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits } at 18 <i>d.</i> —————	02	05	00
10 pounds of Juniper-berries at 3 <i>d.</i> —	00	02	06
Coals, and working —————	00	01	00
	<hr/>		
	02	08	06
	<hr/>		

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
45 gallons of Geneva at 20 <i>d.</i> —	03	15	00

Observations upon Geneva.

Geneva hath more several and different names and titles, than any other liquor that is sold here: as double Geneva, royal Geneva, celestial Geneva, Tittery, Collonia, Strike-fire, &c. and has gain'd

gain'd such universal applause, especially with the common people, that by a moderate computation, there is more of it in quantity sold daily in a great many Distillers shops, than of Beer and Ale vended in most publick houses, with this farther advantage, that Geneva is saleable the next day after its being distill'd, which is not to be practis'd in the others: However, it wonderfully improves by keeping, especially when it is full proof, insomuch that some persons distilling Geneva from rectify'd Malt-spirits, with the usual quantity of Juniper-berries, and laying the goods by for eight or nine months, the same has meliorated, and become so mellow a commodity, that it has been sold at double price in parcels, and been preferable to other liquors of dearer prices.

Directions for ordering Juniper-berries.

It is most for your interest to buy the best Juniper-berries that can be procured; I mean such as have been first gather'd at their full growth and maturity; which far excel those that are gather'd green or unripe, and so become black, or saleable only by artful means, but have nothing like the substance and flavour of the best ripe Berries: And the Geneva made of the said best Berries is incomparably better, sweeter, and of a more grateful flavour, than what is distill'd from ordinary Berries. There are several ways of preserving or keeping Juniper-berries for the whole year, viz. after their being first gather'd, lay them pretty thin, by spreading them upon a boarded floor, leaving the windows or doors open to convey more air, that the Berries, by turning them once a day, may become fit to pack, either in barrels
or

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or bags, without the danger of heating, when you have occasion of sending them any ways abroad: But what Juniper-berries are for your own proper use, and for a whole year's consumption, you may put or pack up in any liquor-barrels or hogheads, which are tight and will hold any liquor without leakage; which no wind or air coming or getting to, by keeping the bungs also cork'd up, 'twill preserve your Berries as black, bright and plump, as at the first; you may let your casks lye along any dry ground-room floor; and by opening your bung may see the condition they are in; which will be worst next the bung by the air coming to what lyes next it, so to be at your pleasure taken up.

Another, and more usual way of ordering them is, to let them lye upon a chamber or loft-floor; and when by often turning they are become sufficiently dry and beyond any danger of heating, you may put them all together in a heap in a corner of the said room, as is done with corn in a barn-floor; and so use them as you have occasion.

But because the Berries, by long lying on a boarded floor, will become much drier and lighter than at first; you may take the quantity you distil at once, being first weigh'd according to the prescription, and put them into a measure that's as near the size as possible to your Berries, before they become wither'd and dry'd; and observe well, by marking or otherwise, how far your measure is fill'd, and you may afterwards as long as that parcel of Berries lasts make that your standard, without weighing them any more for the said quantity.

Directions

Directions for preserving Juniper-berries.

The same method is exactly follow'd and made use of in another way of keeping your Berries ; which is, to put them immediately after their being first gather'd into a large tight cask, near full with your Berries, and then putting Proof-spirits upon them, which preserves all their first substance, and prevents all smack and ill favour, to which they are otherwise subject, when they are not gather'd fully ripe and dry : and take up the cover, when you have occasion for any, and measure them out dry, according to the measure you observed they were of when you weigh'd and measur'd them before their infusion ; and as your Berries sink in the cask, you must draw off your Spirits with a brass cock put into the said cask, always keeping your Spirits of an equal height with your Berries, and using the Spirits as you draw off for the Geneva you then distil. But for those who live in the country, where Juniper-berries are both good and cheap : (for the other methods are used in *London*, because of the dearnefs and badness of Juniper-berries ; in which commodity the greatest frauds possible are made use of ; in their being gather'd green, not half ripe, and wanting at least a year's growth of their full ripeness and maturity ; in their being sweated and ripen'd by putting in stoves, kilns, or ovens, and artfully colour'd, and so mix'd with good goods, whereby the whole is adulterated, and becomes a downright wrong, and oftentimes a great loss to the person that makes use of them) I advise you to be careful in procuring your Berries of persons, whose report you can depend upon

upon of their being gather'd at their full ripeness: lay them pretty thin on a loft-floor, turn them often 'till they be pretty dry, then may you lay them in a bulk, and constantly weigh them as you have occasion; and if you should observe them to heat or sweat, when they lye in a greater quantity together, then spread them abroad thinner on the floor, and so you will recover or preserve them always sweet and well-savour'd, and always have Geneva of a true flavour, gust and relish.

Cardemom, or All-fours.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
30 gallons of proof Malt-spirits at } <i>1 s. 6d.</i>		02	05 00
3 pounds of Clove-pepper at <i>9d.</i> ———	00	02	03
3 pounds of Caraway-seeds ———	00	00	07
3 pounds of Coriander-seeds ———	00	00	04
3 pounds of Lemon-peels at <i>4d.</i> ———	00	01	00
14 pounds of ordinary Sugar at <i>21 s.</i> } <i>per C.</i>		00	02 07 $\frac{1}{2}$
Coals, and working ———	00	01	00
		02	12 09 $\frac{1}{2}$

For sale.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
45 gallons of Cardemum at <i>2 s.</i> ———	04	10	00

Directions

*Directions for making Cardemum, or
All-fours.*

In this liquor, any one, or more of the ingredients may be omitted or alter'd, and another thing that's cheaper may be substituted: as for Clove-pepper, you may use Angelica-feed or root, or Mint; or for Lemon you may use Orange-peel, or wholly omit any particular that is predominant, or disagreeable in its flavour; and add proportionably in a greater quantity of the other ingredients. You may reduce it lower by adding more liquor, and adding a greater quantity of the ingredients, as in Aniseed-water: let it stand two or three months before you use or expose any of it to sale.





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3. Of ordering your Still-house, so as to work to the best advantage.
4. What quantity of Water will be necessary, and of what kind.
5. How to erect your Still, Flue, Ash-hole, and other matters belonging thereto.
6. How to erect your Worm-Tub.
7. How to erect your Pump.

8. How

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THE DISTILLER'S Directory.

1.

IN rectifying and distilling compound goods a smaller Still is known to make a cleaner and better commodity than one that's larger: and one that's half a hoghead gage, over and above your hand breadth depth from the edge or top of your Still, is accounted the fittest size for a moderate trade; both as it may be managed without fatigue, and as it produces encouraging profit much superior to the fund it requires.

2.

When you erect and place your Still, and other utensils thereto belonging, let it be, if possible, in a building, out-house, or shed, separate from, but near adjoining to your dwelling-house, or shop, to prevent any hazard which may arise

by fire, to which all spirituous goods are liable; and no otherwise to be extinguish'd, but with a woollen blanket or rug, drench'd in water, and cast upon the flame.

3.

Let your work-house be large enough, not only in regard to your Still, Worm-tub and Pump, which must be all placed in a row, or ranged together, to contribute to your working with ease and pleasure; but because your Spirits which are for distilling, must lye in some proper place or part of your work-house, to be near at hand to charge your Still with; and at some reasonable distance from the fire; and also that you may have room enough for placing all your empty vessels, tubs, cans, and other utensils properly belonging to the Distilling trade, to have them near at hand on all occasions; and let your Still-house floor be paved with broad stones or flags, having a descent to carry off all the wash from your Still, your hot liquor from the Worm-tub, and all other occasional stop, which will be made by washing your casks, &c. whereby your Still-house floor will always be kept clean.

4.

It is absolutely necessary, and what you must first of all be appriz'd of, that there be sufficiency of water where your Pump is to be sunk, both to keep your Worm-tub continually cool, to make up all your goods to their proper strength, and to serve all other occasions whatsoever: it matters not whether your water be soft or hard, if you have but plenty enough of it.

5.

Your Still must be plac'd upon brick-work, having an ash-hole of twentyfour inches long, nine inches broad; and to the iron bars, where your fire is to be under your Still, twenty one, or twenty two inches high; and made somewhat sloping, the better to command the ashes.

When your brick-work is made about the height last mentioned, you must place your grate-door (both of strong iron) before, or in the fore-front of the Stove, or place, where your fire is to be made under your Still. The said iron door and frame must be about ten inches long, and eight inches broad: Close behind the said door and frame must be plac'd two flat cross iron bars, about two inches and a half broad, half an inch thick, and fifteen or sixteen inches long: Both ends of which bars must be laid about three inches into the brick-work, for fixing them the better; and the upper part thereof must be about half an inch lower than the upper edge of the door-frames: Just behind the said two iron bars must be plac'd another flat iron bar, about an inch and half broad, half an inch thick, and sixteen inches long, fasten'd in the brick-work as the former, and near an inch lower: Upon which last mentioned flat iron bar your iron grate must rest at the higher end; and the other ends of your iron grate must rest upon another flat iron bar of the same dimension fasten'd at the furthest end, or most distant part of your Still-bottom.

The iron grate must consist of about eight bars of inch square iron, but exactly of one length, made broad, or flatted at each end, to rest on the said two cross iron bars, so as the upper part of the square bars must be even with the higher part of the flat iron bars on which they rest, that the fire-shovel or
E 3 coal-

coal-rake may run smoothly along them. The said square iron bars must be about eighteen inches long, and laid loose within a crown's breadth of each other upon the aforesaid two broad iron bars, as firm as you can, yet so as they may be put in, or taken out as occasion requires; then raise your brick-work, so as your Still-bottom when fix'd, or rested thereupon, may be about ten inches above the iron grate, that the fire may have room to play; and the part of the brick-work under the Still where the fire is plac'd, and whither it extends within the stove, must be in-laid with hearth inch-tiles, well fasten'd with lime and hair, which will abide the fire much better and longer than bricks. Let not the fire-place be too broad, wherein your workman's judgment will have regard to the sides not being of the same thickness with the bottom of your Still. There must be left a sloping place, or hole proper for conveying the smoak into the flue or chimney; which flue must be carry'd up a convenient height, to draw the smoak, and convey it as in its proper vehicle. Let your Still-cock come so far through the brick-work, as your wash may run out either into cans or otherwise, as you have conveniency for conveying it away. The brick-work about your Still must be exactly round, as high as the upper nails of your Still, sloping from the fires, lest any goods boil over; and very well mortar'd, and cover'd all round with coarse canvass or hop-sack, to keep the fire closer in, the wall from cracking, and your cloaths from being abused thereby.

6.

Your Worm-tub must be plac'd very near your Still upon a strong wood-frame, according to the size of your Tub, which must be four or five times
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the quantity of your Still, so as every staff of the Tub may rest firmly upon the frame, the better to support the great weight of such a quantity of liquor as is necessary to keep the Worm constantly cold, or cool enough. Your Worm-tub-frame must be so high, as when the Tub is plac'd upon it, the low end of your Worm which comes through the Worm-tub will admit of your cans being readily plac'd under, and taken away when they are full. The upper end of your Worm must be placed so, as the nose of your Still-head may go into it without any difficulty, and shut in so close as to be easily luted; and your Worm-tub must stand so upright as no liquor may hang in the Worm, which you may know, by putting a pint or quart of water into the Worm, which will run out at the lower end of your Worm. In the middle of your Worm-tub you may place a wood-gutter about three inches square within, to reach from the top of the Worm-tub to the bottom of the same, having about three or four inches on the opposite sides at the bottom-end of it left open, that the liquor that's pump'd into the gutter, which descends, may flow out at the said two breaches to the lower part of the Worm-tub, which forces all the hot water to ascend upwards, and runs either over the Worm-tub, or rather through a leaden pipe of a moderate size, which is call'd a waste pipe, being put through, and solder'd in your Worm-tub, and extended down your Tub-sides, to what further length you please, to convey the warm water from your Tub, till the liquor in your Worm-tub be perfectly cold; which by the continuance of your Still working will grow hot again, and again must be still cooled after the same manner.

7.

Your Pump must be plac'd next your Worm-tub, and of such a height, as you may have a spout put into that part of your Pump which is next your Worm-tub, under which you may fix a wood-gutter, to reach to, and be laid in the gutter, that's fix'd in the middle of your Worm-tub, that the liquor may be more easily, and with less waste, convey'd into your Worm-tub, in order to cool it. You must have also another spout in the fore-part of your Pump, much lower than the other, for drawing liquor for all common uses, the higher spout being clos'd, and only appropriated for cooling the liquor, when hot in the Worm-tub.

8.

It will be necessary also to have a large iron-bound Water-tub set upon a strong frame, or Still-yard, about the height of your Worm-tub, and plac'd on the other side of your Still, or in some other convenient place near at hand, to contain a large quantity of water, having a large brass cock therein, to draw off what liquor you may stand in need of suddenly; which may be of very great service to you upon any emergency; and may be drawn off in much less time, and with less trouble than by pumping; for the Still may accidentally be sometimes dry, and prove of dangerous consequence, if you had not a quantity of liquor ready on all occasions in your Water-tub to repair to. Your Water-tub must be open at the upper end, that you may dip or drench your cans into it, or lay any small rundlets in it, to steep and become tight; and that your Tub may be more easily fill'd with water.

9. You

9.

You will find your interest in keeping a good middle-siz'd Press, plac'd in a corner of your work-houſe, and fix'd ſo ſteddily, as not to be mov'd when you uſe it, having a very ſtrong bed or place, in which the goods to be preſs'd are put; and five or ſix hair-cloths ſomewhat broader than your Preſs to be put betwixt every layer of Elder-berries, Cherries, Raspberries, or any other things which are to be preſs'd; all which are to be laid as thin as poſſible, and your Preſs-ſcrew to be drawn pretty much, till the liquor run by a ſpout made of ſheet-lead, nail'd to the fore-part of the bottom of your Preſs-bed, into one of your cans, which muſt be plac'd under it, to receive the juice from the preſs; and draw out your iron pin, to give time to the Preſs to empty it ſelf of what juice lies in the bed: then draw the ſcrew a little cloſer, and allow time for the juice to run out; and ſo more and more, till all the juice is wholly drawn or preſs'd out of the goods.

10.

You muſt have alſo at leaſt two or three iron-bound open-headed tubs, wide at the top, and narrower, taper-wiſe down to the bottom (one of theſe Tubſ is to make up a hogſhead of goods in, another to contain ſomewhat more than half a hogſhead, and another about twelve gallons;) which muſt be plac'd orderly in your Still-houſe, and now and then fill'd with hot liquor out of your Still; and the iron hoops driven, or faſten'd, to keep them firm, and in fit condition to hold the goods that are to be put, or made up in them.

11. You

II.

You must also have three or four iron-bound Cans, either with iron round hands or bales; one to hold five, another to contain four, another three; and if you please, another two gallons; not by bare measure to the top, but let your goods reach no higher than within three inches of the brim; and put a brass nail, foresett, or plug into your Can fix'd therein just where the liquid reaches; which serves for a constant gage for the future.

12.

Another necessary utensil is an iron-bound wood Funnel, which by computation would hold three or four gallons, with a strong iron nosel or pipe to put into the bungs of the casks which the goods are to be put in; which must be ranged or plac'd upon a shelf along with the iron-bound Cans pretty near your Still.

13.

In some convenient part of your Still-house where room may be most spar'd, must be plac'd a pretty large vessel, either cover'd or open, as you please, upon a Still-yard or gun-tree with a cock in it, in which you must put all your Faints or After-runings, untill you have a quantity worth your Stilling over, into which vessel or cask you may put the washings out of your casks, the drippings of your cocks, any goods accidentally spoil'd, either by wrong mixture, spilling on the ground, or otherwise; or any thing else that has a spirituous matter or substance in it.

14. Another

14.

Another piece of necessary furniture for your Still-house, and which cannot be dispenc'd with, is a good strong Tin-pump of about five foot long, and six inches in circumference, its nosel about six inches from the top of the pump, and the said nosel about fourteen inches long from the body of the Pump; besides a little angular nosel about four inches, to be put on upon the other, or taken off, as your occasions require. The use of this Pump with its appertenances, is to draw off your Spirits out of the pieces into your Cans to charge your Still withal; and for many other purposes to which it will be serviceable.

15.

A pewter Crane is also absolutely necessary, made somewhat semi-lunar, or like a half moon or angle, about six foot and a half from one end to another, and four inches round about on the outside; to draw goods out of any vessel where the Pump cannot play.

16.

A pewter Valencia is also useful, being about two foot long, tapering at the end, which you put into the piece, or any other vessel, to draw out any small quantity, by putting or moving your finger on the other side of the Valencia, whereby the liquor is suck'd into the gim-crack for your tasting or trying of its proof; which with the Crane may be hung against the wall.

17.

Hippocrates's bag, or Flannel-sieve, is another thing very necessary for the Distiller, whereby all bottoms of casks, tho' never so thick and feculent,

culent, by putting into this Bag or Slieve to filter, become presently clear, the porous parts of the said Bag being presently fill'd with the groffer matter; and the thin or liquid element runs clear from the Bag, and is as good as any of the rest: Also any foul goods or liquor may presently be made clear and fine, by putting some powder'd Alabaſter into the goods or liquor, to ſtop the porous parts of the Bag or Slieve, which preſently becomes, or runs clear, leaving nothing but the ſediment or groſs matter in the Bag; nor do the goods or liquor contract the leaſt ill flavour from the ſaid Alabaſter-powder.

The ſaid Bag or Slieve is made of a yard or ell of flannel, not over-fine or cloſe wrought, laid ſloping, ſo as to have the bottom of it very narrow, and the top as broad as the cloth will allow, well ſewed up the ſide; and the upper part of the Bag folded about a broad wood-hoop, and well faſten'd to it; then boring the hoop in three or four places, fix to it a ſtrong box-cording to ſupport it, and hang it up.

18.

You muſt have for your Still-fire a large Poker, Fire-ſhovel, and Coal-rake, with other neceſſary utenſils for your Still-houſe; a Cooper's Hand-ſaw, Edge, Gimleck, a ſtriking Gimleck, a Hammer, a pair of ſcratching Irons, a pair of Tarriers, a Bung-borer, a Box-foreſet, and a box of Bungs.

19.

When you are to diſtil, you are to make ready, againſt your Still is charged, a Paſte of the bigneſs of a Turkey Egg, made half of Spaniſh wheat, and the other half of Rye-meal, Bean-meal, or Wheat-flower well mixed together, and
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made into a PASTE with Water, of the consistence of an ordinary paste for baking, and having put on your Still head, with its nose in the upper end of the worm, then take your Paste, working and making it plyable with the heat and operation of your hands, and spread it upon the junctures of the body and head of your Still, and that part of the nose of your Still head, which goes into the end of the worm, to keep in the goods from boiling over: Make the Paste very smooth, by wetting your hand (with which you lay on the Paste) oft times in water, to cause it to lie the closer, and secure the goods from all events, and reserve a piece of paste about the bigness of a small apple; lest the luting should crack or break out, which is very dangerous, and must therefore be carefully attended to and examin'd, and, in case of any defect, mended with the Paste reserved for that purpose.

20.

When you set up a new Still, which has not been used, let it be fill'd within your hand breadth of the brim with liquor, and put to it a peck of Wheat-bran, or Chissell, and put the head upon the Still, and fix it firmly on with a wood bar, about the thickness of your wrist, upon the loop, a little below the neck of your Still: And the upper end of the said wood bar must be fastened under some beam or lintel perpendicularly, to prevent the Still head from moving by the force of distillation: Then lute your Still as directed in the foregoing paragraph; and having made a fire under your Still proper for that Purpose, draw off two or three or four gallon Cans by distillation; whereby all the joints and nails of your Still will be cemented, and made fit for distilling your strongest proof goods: Then damp your fire with
some

some wet ashes, or extinguish it wholly with liquor cast upon it, wash out your Still head and worm, afterwards you may charge and work your Still with what goods you please.

21.

All your Spirits to be distill'd should be proof-goods; which you try, by having a small quantity put into a glass Phyal, and shaking it with your hand; if the blebs or proof of it continues a pretty while upon the top or surface of the goods, it is then what is called proof-goods; and when it is distill'd, it will yield about or very near two third parts; or every thirty gallons will distil to near, or sometimes full twenty gallons; according as the Spirits are higher or lower proof; which you may make proof, or to what strength and weakness you please, by adding that proportion or quantity either of spring or river water, as is necessary there-to: As for example, take and observe this general rule in distilling, that all double goods coming from the Still, clear proof and without faints, must be made up with liquor to that quantity you charg'd your Still with at first: As if with thirty gallons of proof-spirits, it will yield (as above noted) about twenty gallons of high proof goods, the deficiency of ten gallons must be made up with Liquor, till the whole amount to thirty gallons your first charge; and in single goods you add one and a half part more of Liquor (*viz.* fifteen gallons) to what is ordered in making up double goods, whereby you will have in all forty five gallons of single goods. But if your spirits are below proof; upon your shaking the Phyal, or glass, the goods will fall flat, or the blebs or proof thereof will not continue on the surface of it: And according to the degree of it's being reduced more or less below proof, the goods will flatten accordingly;

cordingly; and when such goods are distilled, they'll fall short in quantity; and upon making them proof, and no otherwise will you know what Body they were of, and how far they were reduced.

22.

When your Still is charged with goods for distilling, and luted, then make your fire under the Still; which if possible must be of coals, because their heat is most constant and durable, and wood fires are very subject to both extremes, of too much or too little heat, which are prejudicial and sometimes hazardous.

Let your fire be first pretty moderate, and then by degrees increased, and now and then stirr'd up with your poker, as is usual in common fires; and by laying your hand upon the body of your Still, as the fire gains strength in the stove or furnace under the Still, you will perceive the heat will by moderate degrees ascend up your Still head, occasion'd by the goods in the Still boiling higher and higher. When your Still head becomes warm or hot, then prepare a damp (which is to check or lessen the violence of the fire) which damp is made of about half a bushel of ashes taken from under the stove or furnace, and two or three gallons of liquor cast upon and well mixed with 'em, upon the ground or hearth, before or under your kiln door, to be ready to cast upon the fire, when there is occasion so to do: And move your hand upon the Still, higher and higher, as you find the heat grow hotter, and ascend to the neck of your Still head: Which when it comes with any vehemence more than a common warmth to turn downwards, towards the Worm end, in which your Still nose is luted, cast three or four fire-shovels of wet Ashes, upon the hottest part of the fire,

fire, which must be done very smartly and critically, at the very turning of the highest part of the Swan-like neck of your Still towards the Still; whereby the violence of the fire is abated, which wou'd otherwise bring down the goods through the worm very foul in a rushing stream; which is dangerous and by any means to be prevented: Whereas your damping the fire seasonably, brings down the liquid like a small twine thread.

23.

You must take especial care not to touch or meddle with your fire while your Still is near coming to work, because of increasing or heightening the heat, which wou'd unavoidably make your Still run foul: But when your fire is damp'd and come to work, you may let your kiln door be shut close, and continue so, as long as the worm runs as small as a moderate Box-cord, or as through a large turkey quill: But as the kiln door being long shut will overcome the Damp, and bring the fire to its former violence, so when you are apprehensive of it, you may throw open the kiln door, which abates the heat immediately, and lessens the stream flowing from your worm: And you must cautiously meddle with your Still fire, 'till more than one or two Cans be come off from your Still, which is about the double strength of the first goods, and then there's less danger, and you may more safely stir up or mend your fire, or shut your kiln door, to make your goods come down with a little larger Stream, 'till the goods be wholly come off from the Still.

24.

When you perceive near two third parts of the first quantity which you put into your Still to be run from thence, then be often tasting the goods,

goods, which must run as long as any strength remains; when all the goods are come off, the former clear colour of the goods will turn to a blew, and sometimes according to the nature of the goods, to a whitish colour; which are flegmatick and foul, and if they were suffer'd to run amongst the goods, wou'd make them taste disagreeably: But by being kept by themselves, the goods are clean and well-tasted: And the faints or after-runnings, being put and kept in a vessel till you have a quantity together, you may then distil them (I mean the faints,) charging your Still within a hand-breadth of the brim; and casting two or three pounds of Salt to each Still, and drawing them off as other goods, as long as the strength continues in the spirits, which generally will be about one fourth part of the whole. When the strength of the Spirits is gone or run off, take away your Can of goods, and let the faints run into another Can, as long as the faints will burn on the Still head, being cast thereon, and a candle put to it to try the experiment.

25.

When your faints are drawn into spirits, which must be made proof, that you may make a better judgment how to convert them to other goods, you must always make them into such goods as carry a very predominant or prevailing gust or taste, above other ingredients: And therefore the common and usual method taken with them, is to convert them into Aniseed or Wormwood waters; and sometimes into All-fours; putting a little more than the receipt of ingredients, which is made use of, the same goods being drawn from clean Malt-spirits: And also dulcifying a little higher than otherwise, purposely to cleanse or carry

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ry off any ill relish contracted from the multiplicity of mixtures in the faints.

26.

You must always keep the water in the Worm-tub very cold or cool, that the goods coming off the Still may be perfectly so; which will contribute to bettering the goods, and making them settle sooner: Whereas the goods coming off warm, or hot from the Still, they lose considerably of their strength, which is extracted by the hot liquor, become more unpalatable, and not without much time and difficulty are made fine.

27.

When you distil any goods which are not above one third, or one half part of the quantity your Still will work, be sure you add one, two, or three Cans of liquor to the goods, you charge your Still withall; both for better preserving the Still from damage; and because the goods will purge and fine themselves, by having a quantity of liquor with them wrought together; and will run considerably more from the Still, than when the Still is charged with full proof goods; not that they can possibly be more in strength or substance, but by their being weaken'd with liquor put to them, are drawn lower, and require less liquor to make them proof.

28.

When you draw off your Still more than once in a day; if your second distillation be of the same goods with the first, and the quantity of each the same; then when your goods and faints are drawn off, damp your fire very well under your Still, draw your wash quite out of your Still, and without cleaning out the ingredients, you may charge

it a second time with the spirits and ingredients; and draw off your goods as at other times: But if you charge your Still a second time with the same goods, and no greater quantity than what the goods run from what your Still was first charged with; then when your goods are come off, and without suffering the fairs to run, damp your fire, strike off your Still head, and charge your Still accordingly with your ingredients, and draw them off as you do at other times. But if you charge your Still a second time the same day, with goods different from, and of another sort than what your Still was first charg'd with; then clean your Still of all the wash and ingredients; scrape off all the luting on the Still-head, and upper part of the body of your Still, which remained or was left on the Still and head; wash down the worm with about a quart of liquor, to prevent all Obstructions therein; and draw off your goods of the second charging or distillation, as you do at other times: Nothing differing either in drawing off, or making up the goods, from what you do when your Still is charged with no other goods, or only one distillation made thereof at that time.

29.

Be sure that betwixt every new charging your Still, you scrape off all the Paste which cleaves, or is burn'd to the Still head, or the brim of your Still; which might endanger your new luting, to crack or break, were it put upon the old paste or luting: And also let your worm be constantly washed down, with a pint or a quart of liquor, lest any thing be accidentally got into the worm, which might prove of the worst Consequence, and must therefore be prevented or guarded against, by the greatest caution you can possibly take therein.

30.

It conduces to meliorate your goods, when the ingredients, of which they are made, are infused in spirits over night, before they are distilled; which spirits must cover the ingredients, and being measured, you must allow what they measur'd to out of the quantity you put into your Still; so that both the spirits in which the ingredients are infused, and the other which you measure into your Still, must together make up your intended quantity: And let all your ingredients according to their several kinds, be bruised, sliced, or otherwise dissevered, before their infusion, if you have time and opportunity for so doing.

31.

Take special care that no manner of Grease, Tallow, Soap, or any other such like unctuous things, get or fall into your Pieces, Tubs, Rundlets or Cans: Because they quite take off all manner of proof of the goods; and although their strength be very high, yet will they fall as flat as water.

32.

Above all things beware of lighted candles, torches, papers, or other combustible matter being brought too near your Still or any vessel wherein your goods are contained; which are subject to take fire upon very slight occasions: As it is in itself most dreadful, being compar'd to Fire and Gunpowder, and no other ways to be extinguished, than is directed in the second paragraph of this directory.

33. You

33.

You must take care to have your Stove-chimney, or Flew, pretty often swept or clean'd: Both to prevent the danger of its taking fire, and to make your flew, or kiln Chimney, draw the better, whereby your Stove-fire will be first lighted and afterwards continu'd with less trouble.

34.

It is best for preserving the strength and flavour of your goods, that as they come off your Still into your Cans, exactly fill'd up to the plugs or brass nails of four or five gallon measure, they be empty'd into the casks they are to be kept in; always noting, or keeping an account of the several Cans or quantity of goods to be put by; which must be made up to their several proportions, according to the quality or kind of goods so to be made up; which is, or must be, by adding so much liquor, or pump water, as compleats the same. And in dulcifying your goods, first weigh your Sugar you intend to put in; then dissolve it in one or more Cans of your liquor, with which you make up your goods; bruising all the lumps of the Sugar, and stirring it very well with a romager in your Cans, till all is dissolved; and then emptying it into your other goods; and mixing all well together, by drawing off several Cans of the goods at the cocks, and putting them in again at the bungs; and then romage all well together, till they are perfectly well mixed and compounded.

35.

When you have made up your goods to the quantity and quality you intend, that they may become fine and clear; all your goods which are

made proof, will without any art or composition settle, and become fine, and clear, within one or two days at most; but goods that are reduced below proof, the weaker they are made in strength, the longer they are in becoming fine or saleable. To every hogshead of Geneva, or strong waters, put five or six ounces of Alum powder'd, so as to go thro' a coarse hair sieve, and mixed in three or four gallons of the goods, well stirred or dissolved in your Can, and then put to your whole quantity, romaged and very well stirred together, some Cans of goods being drawn off, and put to the goods again, to mix them the better. And the Geneva will be clear in one day; and the other in two or three days.

36.

When your distill'd goods are finished, being set upon a Still-yard or pair of Gantrees; in order to their being drawn off, you must let the bungs of the casks continue open, till they are become fine and fit for use: Then you may put the bungs in, but not too hard, and set a forset or a plug-hole, and a forset, or plug put slightly therein, in a proper place of your casks, to take out or loosen, to give vent when you draw off any goods: It is a vulgar error to suppose that goods are injured, or weaken'd, by the bungs being left open: For where there is any quantity of goods, of any tolerable body or strength, they receive no manner of injury thereby, but mellow and clear more and more, by having good vent either by bung or forset.

37.

You may make any goods deeper or lighter colour'd, by dulcifying with browner or finer Sugar: And as all common goods bear a low price, they

they are always sweetened with the cheapest brown Sugars, which commonly make them of a deep amber colour; which by long custom and usage has so prevailed with the populace, that goods of a lighter colour, occasion'd by being dulcify'd with better Sugar, are less accounted of; whereas fine goods, which are generally drunk by persons of judgment, and distinguishing palates, must be made up with fine Sugars; and the clearer and lighter colour they are, are more acceptable and valuable, to those who know what they buy: And some persons are so nice this way, as to dulcify with loaf Sugar; but the sugars in your Receipts specify'd are what will give a general satisfaction to all your customers.

38.

When you first draw off any goods lately distilled, that which lies next the cork, will not be clear, or left fine; according as the goods have been a longer or shorter time distill'd: And must be set aside, till you have drawn off what fine goods you have present occasion for; and then you may put what you first draw'd in at the bung, and it will settle in a very little time: And when any of your standard, or other casks, are near out, or to be emptyed, and drawn off, let all the bottoms be drawn into one of your Cans; and first put one, two, or three gallons of liquor, according to the size of your cask, to wash out your cask; and let your first liquor with which your cask is washed, be put amongst your faints: And what liquor you wash clean out withal, must be cast away. Then take your Can of bottoms; and first hanging up your flannel sieve in some convenient place, put your bottoms into it all at once, if your bag will hold it. The first runnings of the bag will be foul, till all the porous parts of the

bag be filled up with the sediment, that is amongst the bottoms of casks: And when they run fine, you may take away the foul goods, and put a clean vessel to receive the fine goods; and when your bag is near run out, you may put in it what goods first run foul, when the bottoms were put into the bag: And let the bag hang, till all the goods be quite run off from the sediment; which must be then cast away: But the fine goods, so filter'd through the flannel sieve, will be as good and wholesome as any of the rest: And the bottoms of fine goods, which are much more valuable, must be filtered or put through white cap paper folded in four parts; one part or leaf to be opened, and made capable to receive what it will hold of the bottoms; being put into the upper continent of a large tin funnel; which will distil off all the goods from the sediment,

39.

When you are to draw a sample of goods, to shew a person that has judgment in the proof; don't draw your goods into a Phyal to be tasted, or make experiment of the strength thereof that way; because the proof will not hold, except the goods be exceeding strong: But draw the pattern of goods, either into your glass from the cock, to run very small; or rather draw off a small quantity into a little pewter pot, and pour it into your glass; extending your pot as high above your glass, as you can without wasting it; which makes the goods carry a better head abundantly, than if the same goods were to be put and tryed in a Phyal.

40.

When you are to buy any Brandies or spirits, don't consent to take them by measure: But having tasted and tryed them in a Phyal, insist upon
having

having them by weight at seven pound three quarters to each gallon, and the stronger spirits will be lighter than what is reduced.

41.

All Brandies whether French, Spanish, or English, being proof goods, will admit of one pint of liquor to each gallon, to be made up and incorporated therewith in your cask, for retail, or selling smaller quantities: And all persons that insist upon having proof goods, which not one in twenty understands, you must supply out of what goods are not so reduced, tho' at a higher price: For all goods which are high proof are cleaner and have a better flavour, than the same goods will have when they are reduced: And the more they are brought below proof, they contract a worse relish, and are not so capable of improving by keeping, as when full proof: So that you must lower the proof of a lesser quantity of Brandies at a time, whereby you will find your account considerably: Not but the *Londoners*, who deal into the country, reduce the same commodity one half part lower, and sell at small prices: But I wou'd dissuade you and others from that practice.

42.

It is a custom amongst retailing distillers, which I have not taken notice of in this directory, to put one third or one fourth part of proof Molossus Brandy, proportionably to what Rum they dispose of: Which cannot be distinguished, but by an extraordinary palate, and does not at all lessen the Body, or proof of the goods; but makes them about a Shilling a gallon cheaper; and must be so mixed and incorporated together, in your retailing cask. But you must keep some
of

of the best Rum not adulterated, to please some customers, whose judgments and palates must be humour'd.

43.

When you have a mind to recover any goods to a better body or strength, which are too low or weak; if they be Brandies, Rum, or fine cordial waters, you must put a proper quantity, by little and little at a time, of spirit of Wine to the goods; mixing or stirring them very well together, and often trying them, until you have perfectly restored them to the proof you desire; which may be done with little or no loss: Because the spirit of Wine lies you in but about the same price with the cordials, and costs less than some of your Brandies. If you want to recover or amend any of your common waters, or Genevas, you must put such a quantity of proof or double goods of the same kind and denomination to the other, as the price will bear, or will answer your intentions, by such a composition or mixture. If by putting proof and weak goods together, the colour or face of the goods be spoiled, which before their being mixed together, were both fine, as it frequently happens, you must clear and fine them, as you do when they are newly distilled: Or if you can't stay their settling, then cast about a pound of Alabaſter powder into your mix'd goods, to stop up the porous parts of the flannel ſieve, which fines them immediately.

44.

If by chance or accident any goods happen to be spoiled in their complexion, so as to become not saleable, as sometimes, especially in Geneva's, comes to pass; or were they by some ingredients to be turn'd as black as ink; you must then distil

still them over again, only putting half the quantity of the ingredients as usual; and they'll come perfectly fine as rock water from the Still, and must be dulcified according to their quantity, just as they were at their first being made. But the goods, notwithstanding the misfortune they met with, will be much better than they were at their being first made.

45.

As you receive so great an advantage by having your discoloured goods brought to their proper complexion again, by their being distill'd a second time, as is mention'd in the foregoing paragraph; so that is ballanc'd by the disadvantage that you lose all the dulcifying wherewith they were before sweeten'd; and by every distillation they are weakened near one in twenty, tho' improved in goodness as aforesaid.

46.

You may colour any sort of goods according to the fancies of your several customers: If your Raspberries grow too pale, as they will do, after their being twice or thrice drawn off, and fill'd up with plain brandy; then a quart, or what more you find necessary, of cherry-brandies must be put to the Raspberry, as you make it up; to give it a deeper tincture for sale. If your plain brandies want a higher tinge, then a little burnt Sugar or Treacle does it immediately: And so your own judgment and experience will direct you in all the rest.

47.

You will find it your interest to keep such a Stock of ingredients by you, as not to be necessitated to buy in the Country; where you must pay

pay dear for them, and where you have a much worfe commodity, and pay sometimes a double or triple price: Because several of the ingredients are only in the hands of Apothecaries; who also are seldom over stock'd therewith, and cannot, or will not sell for a moderate gain.

48.

You must be so prudent as to make a distinction of the persons you have to deal with: What goods you sell (especially fine goods, which always yield a good profit) to Gentlemen for their own use, who require a great deal of attendance, and as much for time of payment, you must take a considerable greater price than of others: What goods you sell to persons where you believe there's a manifest, or at least some hazard of your money, you may safely sell for something more than your common profit: What goods you sell to the poor, especially medicinally, (as many of your goods are saniferous) be as compassionate as the cases require: And what goods you sell in a merchandizing way, you must have regard to the balance of trade; which you have very much in your own power, yet won't be managed without a good correspondence abroad, and a good intelligence at home, especially about the quality and prices the goods are of, and bought at from the Merchants, by whom your country chapmen are supply'd; what are the contingent charges of bringing their goods home; what time of credit is given; what or how much may be supposed *per Cent.* in riding, charges, and bad debts: All which must have their due weight and consideration, in your governing your self, both in making your goods and fixing your prices.

49. What

49.

What goods are most in demand, suppose Geneva, strong Waters, or ordinary Brandies, be sure to be therein particularly careful to keep a good stock, and have variety thereof; selling the same for a lesser profit, than any other goods of equal goodness; whereby you'll obtain a general credit in the place where you reside; and by lessening your profit in one thing that is observable and taken notice of, it will induce your customers to give you your own price, and a much greater gain in things, that are less understood; and yield what's abundant recompence for the other.

50.

You must remember that in most examples or receipts for distilling, specified in the beginning of this book, the computations of profit are made only of one charge of your Still; supposed to be thirty gallons; by which you may make your own estimation in a larger or lesser quantity: And you must also note, that in some directions, about placing your Still, mention'd in your fifth paragraph of this directory, respect is not always had to a Still of the same gage or dimensions.

51.

'Tis usual in shops of great business to sell all liquors for a greater dispatch by weight, to save the trouble and tediousness of measuring; who have tables hung up in their shops like Almanacks, shewing at one view, the contents of any cask by its weight: Which you and all distillers must or ought to be provided of, and have them hung up in frames for that purpose; as being more ready upon occasion, than any examples I can here

insert. Therefore as thinking it superfluous, I have omitted any specimen here; but in *London* all casks for the most part under half a hoghead, are measured by such Cans, as are mentioned in the eleventh paragraph, which Cans are as expeditious a way of measuring as by weight; tho' not known or used in the Country: And as divers liquors are of divers weights, according as they are more or less spirituous; so goods that are proof, by being reduced lower with liquor become more ponderous; yet no allowance is made in their weight, when they retain their first names and denominations.

52.

In *London*, and other southern parts, liquors retailed are sold for greater profit, than in the country: Insomuch that it is a maxim taken for granted, that the retailer has half in half profit; and oftentimes not so contented, sells in short measures, which are five quarts to a gallon; and proportionably in smaller measures; which possesses people with such a notion of the profitableness of that trade, that brandy-shops are in many places as numerous as the ale-houses: And because the distillers have an encouraging profit, it is now become customary, to furnish such customers with gilded and painted casks, bottles, brass cocks, &c. at the distillers charge; he reserving the property, and setting his own name thereon; which is also designed as an obligation, to continue their custom: But the way which has of late obtained, of having dead stock in hand, which is seldom cleared off, is much worse than taking by smaller parcels, and paying ready money for what they have.

53. In

53.

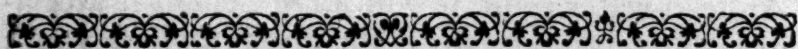
In the country liquid measures somewhat differ in names, but not in substance from what they are in *London*; where they are called gallons, quarts, pints, half pints, quarterns and half quarterns: But in the country, they are termed gallons, quarts, pints, gills, half gills, quarter gills, &c. And one thing is observeable here which is not any where taken notice of, *viz.* that by the city standard, four quarts over run the gallon, by about one and a half quarter pint; two pints over run a quart proportionably; two half pints over run a pint; two quarterns overflow one half pint, and two half quarterns exceed one quartern in the like proportion: And they are sold accordingly, *viz.* one gallon, one shilling and ten pence; one quart six pence; one pint three pence half penny; one half pint, two pence; one quartern a penny half-penny; and one half quartern three farthings.

54.

When you scald out, or season any vessel with hot liquors out of the Still, take care not to put any Aniseed hot-wash into any other vessel than Aniseed-water; for it will leave behind it a disagreeable relish, and gives the goods an ill flavour: But the hot-wash of other goods, such as Geneva rectify'd, All-fours, Clove, &c. leave no ill scent behind, in what cask soever they are put: You must also take care not to put white goods, such as Geneva, Brandies, and most sorts of strong waters, in any casks that have had red liquors in, such as Clove-waters, Cherry-Brandy, &c. unless you first scald out such casks three or four times with hot wash or liquor, to fetch out the tinge of the red colour, which is not effected without

without great difficulty ; and therefore must be very cautiously observ'd.

You are to be perfectly versed (*ad unguem*) in Weights and Measures, viz. twenty hundred weight is a tun, one hundred and twelve pounds is an hundred weight, twenty eight pounds is a quarter of a hundred weight, sixteen ounces is one pound ; lower than which you need not go : So also one tun of liquors weighs about twenty hundred weight, and consists of four hogsheds ; one hoghead contains sixty three gallons ; one gallon of strong waters or Vinegar weighs eight pounds ; one gallon of proof-Brandy or Spirits weighs seven pounds three quarters ; one gallon of Oil weighs seven pounds and a half ; and one gallon of Treacle, or Honey of a good consistence, is ten pounds and a half (and sometimes twelve pounds is allow'd in Honey to the gallon) : And a hundred weight is abbreviated in writing by this character C. a quarter of a hundred by Q. and a pound weight is express'd by lb ; and an ounce weight by $\frac{z}{3}$ or G : And so for a gallon you may write Gall. for a Quart Q^t. for a Pint, P^t. and for a Gill, Gil, &c.



CONCLUSION.

THUS have I brought the First Part of my Book to a period, and explain'd whatever seems necessary to be known in the practical part of this Science. I shall now enter upon a Second, and subjoin theory to practice ; in which I shall endeavour to give an account how these distill'd
Cordial

Cordial-waters operate upon our bodies, and what sensible relief and benefit we receive from 'em, when regularly and medicinally taken; as on the other hand, I shall lay open the terrible consequences of a too frequent use of 'em. I have reduc'd my prescriptions to a Still of three gallons charge, which is the smallest size that is now in use; and by this means have made 'em serviceable for all persons. I have added several rich Cordial-waters, not mention'd in the first part, and have further taken notice of the different methods of compounding distill'd Cordial-waters, which are us'd by several persons in liquors of the same denomination. This I purposely omitted in the foregoing book, as fearing to perplex the reader with a multiplicity of prescripts; and besides designing it solely for the wholesale trade, I thought it most convenient to confine myself to one, which I judg'd most serviceable for that business: But here I have given the reader variety, and left it to his judgment to make his choice. The theory is supported by the authority of the most eminent and approved writers, whose works are a sufficient testimony of their abilities and learning. And however it may be receiv'd, I will venture to say with *Culpepper*, that it comes as near the truth as the men of *Benjamin* could sling a stone; nearer it need not be, but more politely handled perhaps it might; however as it is, it has truth on its side, which is the best patron, and under that protection I leave it.

The End of the first part.

Corinth waters operate upon our bodies, and
 with leucis robust and honest we receive them
 for, when rightly and moderately taken; as
 on the other hand, I shall lay open the terrible
 consequences of a too frequent use of them. I have
 reduced my experience to a still of three gal-
 lons of water, which I have distilled in a new
 iron charge, and the residue is now
 in the head of the receiver, and made up by
 the little bottle, which I have added to the
 Corinth waters, not mentioned in the first part,
 and have found a new source of the different
 kinds of water, and distilled Corinth waters,
 which are sold by several persons in London, or
 the same account. This I purposely om-
 ited in the foregoing book, as being to perplex
 the reader with a multiplicity of particulars, and
 besides, being a liberty for the whole trade,
 I thought it most convenient to confine myself to
 one, which I will now reserve for that part
 next. But here I have given the reader variety,
 and let it to his judgment to make his choice.
 The theory is supported by the authority of the
 most famous and approved writers, whose words
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 will venture to say with Calaneo, that it comes
 as near the truth as the men of letters could
 find a home. For it is not to be, but more
 fully handled perhaps it might, however as it
 is, it is not to be, which is the best pa-
 tron, and under that protection I leave it.

The end of the first part.

A
Compleat Body
OF
DISTILLING,
Explaining the
MYSTERIES
OF THAT
SCIENCE,
IN

A most easy and familiar Manner;

Containing an
Exact and accurate Method of making all the
COMPOUND CORDIAL-WATERS now in Use,

WITH

A particular Account of their several Virtues:

Adapted no less to the Use of private Families, than of
APOTHECARIES and DISTILLERS.

Part II.

By G. SMITH, of *Kendall in Westmorland.*

L O N D O N:

Printed for BERNARD LINTOT between the Temple-Gates.
MDCCXXV.

Complete Body

OF

DISTILLING

Explaining the

MYSTERIES

OF THAT

SCIENCE

IN

A most easy and familiar Manner

As

Exhibiting and accurate Method of working the
Commonest Chemical Waters now used

WITH

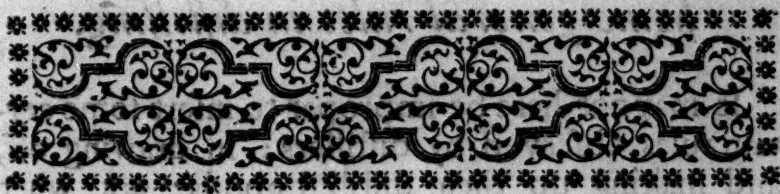
A particular Account of their several Virtues

As they are used in the Art of distilling, and of
the several other Operations of Chemistry

Part II.

By G. SMITH, of Kew in Middlesex

LONDON:
Printed by J. BARNARD, at the New Theatre, in Pall Mall.
1755.



A
COMPLEAT BODY
OF
DISTILLING, &c.

BOOK II.

Aniseed-water.

TAKE Aniseeds six ounces, caraway seed three ounces, proof-spirit three gallons, river or spring water one gallon and a half: Infuse, all night in the Still, and draw off the goods with a gentle fire, no longer than proof; dulcify with brown Sugar two pound, and make up your goods with liquor to their due quantity.

By this addition of water put into your Still along with the goods (which ought never to be omitted in Distillation) the goods will come off cleaner, and in larger quantity from the Still without faints; and will require less liquor to make them up, than otherwise they would do.

Some general rules in distilling.

It may not here be improper to insert some certain rules observed by distillers; in drawing off, and making up their distill'd goods: *viz.* when you perceive about two third parts of the first quantity you put into your Still is come off; then be often trying the goods in a glass or phyal; and when you see that the bell or proof immediately falls down, and does not continue a pretty space upon the surface; then take away the Can of goods, and substitute another vessel to receive the faints: Which if suffered to run among the goods would cause a disagreeable relish, and be longer in fining down: Whereas the faints being kept separate; the goods will be clean and well tasted, when made up with liquor to their due quantity.

It will much improve your goods (and is us'd by most Distillers) to throw into your Still along with the goods, when first charged, about six ounces of bay salt to every three gallons of spirits; and so proportionably more or less to a greater or lesser quantity of spirits: Whereby the goods will better cleanse themselves and separate from their phlegmatick parts; and the spirits so dephlegmated will ascend and come over much cleaner and finer in distillation.

Some also are wont to cast in a handful of grains, to make the goods feel hot upon the palate, as if they bore a better body; yet this conduces nothing towards the advancement of the proof, when the goods come to be tryed in a glass.

When your goods are all come off, and you design them for double goods, you must make them up to their first quantity with liquor: As if,

for instance, you charg'd your Still with three gallons of proof-spirits; they will yield in distillation about two gallons without faints; which deficiency of one gallon must be made up with liquor (and Sugar us'd in dulcifying) to their determin'd quantity: And if you are to make up common or single goods, you must add over and above the prescribed quantity in compounding double goods, one and a half part more of liquor, (*viz.* one gallon and a half) to dilute it for single or common goods. Thus by this specimen may you learn how to make goods proof, and how to reduce them lower to what strength or body you please; according as use or the custom of the place has rendered them more or less vendible.

You must also observe, when you dulcifie your goods, that you never put your dissolved Sugar amongst your new distill'd goods, till the said dulcifying be perfectly cold, for if mixed hot with the goods, it would cause some of the spirits to exhale, and render the whole more foul and phlegmatick, than otherwise they would be.

When you want to fine any goods speedily for present use or sale (especially white or pale goods) add about two drachms of crude Alum finely powder'd to three gallons of goods: Which romage well therein, and it will immediately depurate or throw down the fæces, whereby the residue will become clear and transparent for sale or use.

These observations so useful and necessary to distilling, I could not omit; but thought good to insert them all under one general head: As designing in this following treatise, to touch upon this subject no farther.

Virtues of Aniseed water.

Aniseed water ought never to be reduced below proof upon the account of the oleaginous particles, wherewith this water is highly saturated: Which whilst the goods bear a good body or spirit they intimately commix with, so that they swim and are dissolved therein, tho' imperceptible to the eye (for all Oyls do readily commix, and unite with sulphur, which is the more spirituous part of the menstruum, or goods as they are call'd by distillers) but when the goods are reduced, and the body of them weaken'd with liquor, the Oyl separating from the spirit, its proper vehicle, renders the whole of a milky colour; unpleasant both to the eye and taste. And this is the cause that makes Aniseed water so little in esteem as it now is, and has for some years past been daily falling in its reputation, purely upon the account of its disagreeable gust, which is so offensive to most palates: But if made with Caraway-seeds, as before directed, it will be much more pleasant in taste, and no less efficacious in virtue. It is a good carminative, and commonly is used as such, especially amongst the populace, to expel wind, and attenuate viscidities lodg'd in the first passages, causing pricking pains and tortions there: But as it is an unpleasant and disagreeable water (a cordial I can't call it) when simply taken; it might most properly be used as a common menstruum for drawing carminative and anticholic tinctures with; and wou'd serve much better than common spirits for making Elixir Salutis; whereby the medicine wou'd be render'd more carminative, and less subject to cause griping; and also some of the correctives might very well be omitted,

ted, which only serve to clog up the menstruum, and thereby hinder the due extraction of the cathartic virtue of the Senna.

Angelica water.

Take Angelica roots sliced half a pound; Angelica seeds, and Caraway seeds bruised, each one ounce; proof-spirits three gallons, water as much as is sufficient: Macerate them all night in the Still, and draw off your clear goods without faints; which dulcifie with Sugar one pound and a half, and make up with liquor as afore directed.

Virtue of Angelica water.

Angelica water is cardiac, cephalic, and carminative, and is accounted a good specifick against windy and flatulent cholicks; it comforts the heart, cheers and resuscitates the spirits, and gives a grateful sensation to the whole nervous system; as all aromack, spirituous, and volatile bodies do: which by the volatility of their substance, are as auxiliaries immediately dispensed to, and by their tenuity and subtilty as easily admitted into those sensible organs, with a new supply of spirits, to repair that waste, which their continual motion renders them liable to; whereby all languor or faintness is removed, and their tonick structure is invigorated more forcibly to vibrate and shake off any pendulous or viscous matter adhering to their fibrous or membranous expansions, (as in the stomach and guts;) which lentor may not improperly be call'd the common matrix of indigestion, fevers, cacochymia's, flatulencies, vapours, &c. causing various pains
and

and tortions in those parts wherein included or detained, till by some natural or artificial means it is remov'd. And this seems most efficaciously to be perform'd by those medicaments that are endued with an attenuating and discussive faculty, whose subtil parts have power to penetrate and open the glandular pores, and thereby make way for the exclusion of excrementitious or heterogeneous humours: And that Angelica is endow'd with such qualities, is evident by that pungency or smart impressi^on, wherewith (in tasting) it affects the nervous papillæ of the tongue; and farther, by the use and esteem the antient doctors had of it; who order'd it in their orvietans and antipestilential antidotes and alexipharmick mixtures; for they observ'd its diaphoretick and rarifying quality, and therefore very worthily rank'd it amongst their alexipharmicks; whose virtue and efficacy chiefly consisted in promoting a gentle diaphoresis, thereby expelling the malignity or venenate matter from the center to the circumference, which was thence carry'd off by the glandular pores of the cutis, &c. by a visible perspiration, or gentle dew.

White Clove-water.

Take Cortex Winteranæ six drachms, Pimento one ounce, Cloves two drachms, bruise them, and infuse all night in proof-spirits three gallons; water a due quantity, draw off the proof goods, and sweeten with fine Sugar one pound and a half for use.

Best red Clove water.

Take Cloves bruised six drachms, Jamaica Pepper an ounce and a half, proof-spirits three gallons,

BOOK II. of DISTILLING. 99

lons, water as much as is needful: Macerate, and distil, no longer than proof: Edulcorate with brown Sugar (or rather Treacle) two pounds and a half, and colour it with Elder-juice five or six pints, to the due colour of Claret-wine.

There is yet another prescription for making red Clove-water, which is by putting an ounce of Cloves, and half an ounce of Caraway-seeds to the three gallons of Spirits, drawing off and dulcifying, *ut supra*, and colouring it with red Sanders or Poppy-flowers: Of these you may take your choice.

Virtues of Clove-waters.

Clove-waters are not in much use or esteem, except amongst the populace, who use 'em sometimes to warm their stomachs; or perhaps to expel or drive off a Fit of the Cholick: The Elder-juice in the one, and the Winter's Bark in the other, makes the said compositions to partake of an antiscorbutick and diuretick quality: And if the white Clove-water was sweeten'd or colour'd with Juice or Syrup of Elder-berries, it would be much improv'd in the said virtues; and might sometimes be us'd in that case; and perhaps too with as much success as a more pompous medicine: For by the heat and subtilty of the said Cortex communicated to the spirituous Menstruum, it has the power and efficacy forcibly to attenuate and incide any viscous or saline concretions, which might adhere, or cause obstructions in the capillary vessels or their glandules, thereby hindering perspiration; which being detain'd becomes sharp and acrid, eroding the capillary glandules and surface of the cuticle; whereupon ensue those cu aneous descoedations, which usually attend the Scurvy.

Best

Best Cinnamon-water.

Take choice Cinnamon bruise'd twelve ounces, proof Moloffus-spirits rectify'd three gallons, water one gallon and a half: Macerate them twenty four hours, and then distil and draw off your proof-spirits, and dulcify with Loaf-sugar two pounds and a half, and make up your goods full proof.

There is another Recipe for making best Cinnamon-water, which is by an addition of Nutmegs to the composition, and with a much larger quantity of Cinnamon; which here I shall give you.

Take best Cinnamon bruise'd a pound, Nutmegs bruise'd an ounce, Bay-salt four ounces, strong rectify'd Proof-spirits three gallons, River-water a gallon and a half: Macerate, and draw off as above directed; and dulcify the same with best Loaf-sugar two pounds twelve ounces, and make them up high proof for sale or use.

Virtues of Cinnamon-water.

The best Cinnamon-water is sometimes by persons of nice distinguishing palates and judgments drunk undulcify'd; or only *pro re nata* edulcorated with double refin'd Loaf-sugar put into the glass: Therefore 'twill be your advantage to keep a stock of both sorts always by you: For as it is an excellent commodity that bears a good price, and yields an encouraging profit, of quick demand, and no loss to be fear'd by age, but rather an improvement (for all high-proof goods meliorate, and become better by long keeping)

a greater

a greater stock is therefore requir'd of it than of most other distill'd Cordial liquors. This compound-water is much us'd both in dram and medicine; and is frequently prescrib'd by Physicians in all astringent and corroborating Juleps and draughts where-ever astringent of the Viscera is requir'd: It comforts and strengthens all the noble parts, as head, heart, stomach, nerves, liver, spleen, matrix, &c. it opens obstructions, attenuates and discusses gross humours; and upon that head is rank'd amongst the Alexipharmick tribe; it takes off fainting, palpitations, and tremor of the heart; sickness at stomach, hiccough, vomiting, continual bearing down of the intestines, &c. and is a very efficacious remedy against all or most disorders arising from weakness, and laxity of the nerves; especially proceeding from a humid and cold distemperature: For it powerfully stops defluxions, and dries up and discusses superfluous moisture: And these effects may principally be ascrib'd to the saline and oleaginous particles that arise from the Cinnamon in distillation: The said Salts I take to be of two kinds, *viz.* volatile and fixed; and that not from conjecture only, but from actual experiment: The analysis of the Bark does partly manifest the same unto us: The subtil and pungent atoms that arise from it in simple trituration, and which so sensibly affect or stimulate the olfactory fibres, as thereby sometimes to provoke sternutation, shew us the volatility of some of its constituent particles; for which cause Cinnamon should only be slightly bruis'd for distillation; which when put into the Still, and the potential heat of the more spirituous part of the Menstruum, assisted and actuated by the additional heat of the subjacent fire, comes to act upon the bruis'd and half separated particles of that drug, the finer and more dissipable, or volatile

tile parts thereof are compell'd wholly to separate and disjoyn from the more heavy and fixed Salt, which being now set at liberty, and pois'd up, or as it were born upon the wings of the high rectify'd Alcohol, or aerial spirit, which is then in rising, unites, and comes over with the same in the very first beginning of distillation: For then we perceive this new-drawn spirit to have a remarkable pungency and volatility, if held to the nose, which certainly must be attributed to those volatil saline particles we have now been speaking of; which lying dissolv'd in the Menstruum, 'till admitted into the body, is there by the heat of the blood and spirits subtiliz'd anew, and thereby render'd capable of entering the minutest pores or passages of the capillary glandules; where, if meeting with any viscidty or gross matter that may cause obstruction therein, it attenuates the same by its subtilty, and rarifies it by its heat to such a degree of fluidity, as to make it capable of passing thro' the cutaneous pores, in order for its ejection out of the body along with the recrements of the blood: The Stimulus which it gives the nervous fibres *in transitu*, not a little contributing towards the expulsion or squeezing out of the stagnating humour, otherwise (if too gross for that excretion) to be reassum'd by the reductory vessels, and thereby convey'd to some proper emunctory, to be secern'd as an excrementitious matter: Thus are vapours discuss'd from the brain, and other parts of the body, by opening the pores, and making free perspiration, whereby that load of heterogeneous matter which weaken'd and oppress'd nature is remov'd, and in lieu thereof a calm tranquillity is induc'd upon the whole animal œconomy; which being duly consider'd, we may easily account for that briskness and agility which we immediately perceive in our selves

selves after a moderate dram of these Cordial liquors, which they effect by the foresaid causes, viz. by opening the pores, and giving due vent for perspiration; an evacuation so useful and beneficial to nature, that *Sanctorius* has in his accurate book *de medicinâ staticâ* told us, that more excrementitious humours are in one day secern'd or carry'd off by insensible perspiration, than by stool in fifteen days: And further he affirms, that more than one half of our daily aliment which we receive into our bodies is thrown off by insensible vapours. And to this opinion does that great and learned Physician Dr. *Glisson* assent, where discoursing on the same subject, he has in his *Anatom. hepatis* pag. 370, these words, *Ingens est proculdubio hujusmodi (insensibilium nempe habituum) evacuatio, &c.* Now from the aforesaid observations may we see the danger of obstructed perspiration; for what a load of humours must we necessarily expect therefrom? and what a train of diseases thence ensuing? if not timely remov'd by proper remedies; such as we are now treating of, &c. which are endu'd with such volatil Salts, or particles as are capable of entering the capillary or cutaneous glandules, and forcing open their minute pores when obstructed: But a more immediate way it has of comforting the principal organs or Viscera, viz. by the grateful sensation which it imparts to the nervous genus, by communicating a fresh influx of animal spirits thereto, and consequently new strength and vigour to their languid motion, which being recruited, and the waste of nature repair'd anew, their fibres being contracted, or brac'd up to their due natural tone, by the aforesaid repletion of spirits, are now invigorated to shake off and dislodge any heterogeneous or viscid matter, which may adhere to, load, or disturb them: But since the
nervous

nervous fibres are sometimes so greatly relax'd, especially by superfluous humours, or too much moisture, that this auxiliary or new supply of the nervous fluid can't sufficiently wind or brace 'em up to their due pitch of tensity, necessary to disburthen and free themselves of that oppression; another more powerful assistance they have (to this so necessary a work) and that is from the fixed salt and oil which arises together, by a more vehement heat of fire towards the middle and latter end of distillation; for as they are a more ponderous body than the phlegm, as is seen by their subsiding in water, they require a more forcible heat to raise them, so as they may ascend and come over in distillation; which being effected, they readily commix with, and lye dissolv'd in the sulphureous or spirituous part of the Menstruum: And these are what gives that acute pungency to the nervous *fibrillæ* of the tongue, leaving a sort of roughness thereon (upon tasting this Cordial-water): And the same may we lawfully suppose they do impart (especially the pointed particles of the fixed salt) to the nervous fibres, or their expansions in other parts, which striking, or darting against those sensile organs, cause them forcibly to contract, or shrink up themselves into a more compacted tone; which state of contraction I take to be only a return to their natural site, or place of rest which they had been stretch'd from, by that superfluous moisture wherewith they were annoy'd in that preternatural state of relaxation, which being freed from, partly by the deterfive quality of the fixed salt (assisted by the vibrations of the said capillary fibres); and partly also by the attenuating and discussing quality of the extraordinary hot (and I had almost said acrid) oil; the superfluous humidities falling upon, or lodg'd in any part, are thereby

thereby attenuated or absorbed; whereby the natural tone of the parts being restored, they are enabled to perform their due functions, and also invigorated to throw off by the secretory Canals such excrementitious humours as nature has appointed to be secern'd, which being detained are the source of innumerable maladies, as I afore observed. Thus the stomach having first received their saniferous impression or influence (by dissolving vapours, and detaching viscidities or crude phlegm, the cause of indigestion, flatu's) &c. it immediately recovers its digestive faculty, whereby good chyle is sent into the blood, replenish'd with mild balsamick spirits, fit for the generation of the nervous fluid, which being crouded with no lentor or heterogeneous obstructing matter, is easily dispensed by its canals to all parts of the body to communicate life and motion thereto: And in this state no fuliginous vapours are sent up into the head; and those that were afore lodg'd there causing pains, giddiness, swimings in the head, Catarrhus and other serous defluxions, &c. are remov'd and thrown off by the open'd *perspiracula*, being partly beforehand attenuated by the very warming and aromack effluvia of this cordial.

Thus may we account for the cure of all the enumerated maladies; and after this manner may it be said to comfort and strengthen all the noble parts, or principal viscera, and take away their disorders; as sickness at stomach, vomiting, hicough, &c. and from the heart palpitations and faintings; which only arise from a convulsive motion of its nervous fibres: And upon the account of its subtil ætherial or volatil Salt, whereby it attenuates gross humours, and opens the perspirable pores of the cutis; thereby making way for the transit of morbus humours or vapours; it is

ranked in the alexipharmick class; and upon the account of its fixed Salt, it has a place amongst the deobstruents; and is frequently in many feminine cases given, where opening of the uterine passages is desir'd: And this it effects by the specifick gravity of the said salt (and partly also by its deterfive quality) which being driven by the impetus of the arterial fluid against those obstructed glands, abrades or wears away the obstructing humour or matter, and enables thereby the blood to force open and break through those Capillaries, whereby a way is open'd for those natural and critical discharges, which nature has that way appointed.

Cinnamon-water.

Take small Cinnamon and Cassia lignea, each four ounces, proof Malt-spirits three gallons, water as much as is necessary: Bruise the Barks, and infuse them all night in the spirits; then distil and edulcorate with fine Sugar three pounds, and make it up as in double Cinnamon-water directed.

When you make second Cinnamon-water, it is best done when you have new drawn off your double Cinnamon-water, and having pour'd off the wash from your Still, put the bruised Cinnamon and Cassia along with the spirits, &c. (as above prescrib'd,) upon the Magma of the double Cinnamon-water left in the Still: Which draw off, and dulcifie *ut supra*, whereby your water will taste stronger of the Cinnamon, than otherwise it wou'd have done.

You must be careful in drawing it off, for the Cassia, if drawn low, is very subject to an Empyreuma. The virtues are much the same with (tho' far inferior to) the former.

Caraway

Caraway-water.

Take Caraway-seeds bruised twelve ounces, proof-spirits three gallons, water one gallon and a half: Draw off and dulcifie with Sugar one pound and a half, and make it up as the former.

Another.

Take Caraway-seeds bruised half a pound, Lemon (or Orange) peel dried six drachms, spirits three gallons; water *q. s.* Distil and dulcifie with two pound of Sugar, and make up as usual.

Virtues of Caraway-water.

This water partakes of the same virtues with double Anniseed-water; but is much its superior in pleasantness of taste, if not in virtues: It is an excellent carminative and anticolic water, discussing wind and vapours pent up, either in the stomach, bowels, or included between their membranes.

It abounds with a very warming, discussive, and subtil Oyl; which powerfully penetrates and rarifies included vapours, which being agitated partly by the motion of the fibres, and rarified by the force of additional heat, communicated by the said oleaginous particles of the seed, forces the obstructed wind or vapour to dislodge, and expand it self in order for its discharge out of the body. And of this we have a familiar example (alluding to the included vapours in our bodies) of boys blowing up Soap water with a reed or quill into bubbles: Which by the continual succession of heat and warm air, blown through the said tube, the

included vapours rarifying expand the vesicle or bubble more and more (according to the degree of viscosity of the liquor) till it be stretch'd to such a degree of tenuity that the rarified vapour therein contain'd is capable of forcing its way thro' the same: And that such a collection of vapours may be detained in our bodies is indisputable; we too frequently experiment it by those tortions or griping pains which we feel in the cholic; and the ease that ensues when this pent up wind &c. has forc'd its way either upwards or downwards; and the strepitus or rumbling noise it makes either before, or at the discharge, proclaims to us the cause of our malady, and the nature of the enemy that offends us.

Gold Cordial.

Take Angelica-roots one pound, Raisins half a pound, Coriander-seeds four ounces, Caraway-seeds, and Cinnamon of each two ounces, Cloves half an ounce, Melilot flowers two ounces, figgs four ounces, liquorise four ounces, having sliced and bruised the ingredients infuse them all night in proof-spirits three gallons, water one gallon and a half; draw off your proof-goods without faints; which dulcifie with fine Sugar two pound, dissolv'd in Rose-water a pint, adding thereto the liquor with which you make up your goods proof; and colour it with burnt Sugar to a fine golden colour, or if you please with Saffron tyed in a rag three drachms, and press'd into the goods; adding twelve leaves of Gold, when you put it by for use.

Another.

Another.

Take best Brandy three pints, confection of Alchermes half an ounce, oyl of Cloves ten drops, loaf Sugar six ounces, Mosch and Ambergreece tyed in a rag each three grains. Infuse them all together in a large glass bottle close cork'd and shaken up every day, then filter or decant off the clear liquor, adding six leaves of Gold thereto.

Virtues of Gold cordial.

Golden cordial, as you may see by the prescription, do's wholly consist of carminative and emollient ingredients conjoyn'd with those of a lubricating mucilaginous quality; for which I take it to be much the better: For they induce a softness and smoothness on the parts, and thereby hinder the renitency and adhesion of both viscous and sharp juices; which may either by collection of vapours cause gripings in the stomach or bowels, or by their asperity so vellicate the nervous fibres, as to draw them into spasms: And as the Prince of physick (I mean the divine *Hippocrates*) has well observed, spasms and convulsive twitchings, yea and sometimes a paralysis, often succeed inveterate cholicks: And both ancient and modern practice confirms the same. Dr. *Charleton*, an eminent and learned physician, in his lectures recommended to his learn'd auditors the use of emollient and lubricating medicines, even in continual fevers, to make soft and yielding the passages for the transit of the humours, by smoothing their roughness and inducing a slipperiness; so that the humours may slide along thro' them, without renitency and attrition, which always causeth griping pains in the stomach

and belly when retained: And in Rheumatisms and Pleurifies, lubricating oleaginous medicaments are now frequently prescribed, for the said reasons, and that with laudable success: For we may easily conceive that when the points of any saline or sharp humour are wrap'd up, or as it were sheathed in the mucilaginous body, or rather vehicle of any such like medicament, so as they cannot *in transitu* vellicate the sensible fibres, and the parts being also render'd by the said lubricating quality smooth and yielding to the same, they must consequently thus pass on imperceptible and inoffensive, 'till by the due course of circulation, they be brought to their proper emunctories or secretory organs, in order for their discharge, without offending the parts through which they pass.

The latter ec i pe of Gold cordial, made with confection of Alchermes, is a great cordial; it takes off faintings, swoonings, sickness at stomach, palpitations of the heart, &c. It is also a good neuretick or nervous cordial, warming and comforting the nerves; and thereby takes off cramps, numbness, tremblings, and weakness of the joints, occasion'd either through languor, or obstruction of the nervous fluid: Which effects may in a great manner be attributed to the fragrancy and volatility of the perfumes; upon which score it is also good in some foeminine cases, where the women can well bear the odour of perfumes; but in others they are as pernicious, as sometimes immediately inducing violent hysteric fits, faintings, &c. therefore cannot safely be given in all constitutions.

This cordial may be made cheaper, and full as good with the succ. chermes, in lieu of the confection; for no virtue can be extracted (by a Δ ious or spirituous menstruum) from the pearls pre-
scrib'd

scrib'd in the confection; and the perfumes order'd in the cordial are sufficient to aromatize it high enough for any constitution.

Citron-water.

Take fresh Lemon peels number thirty, figgs fourteen pound, proof-spirits three gallons, water as much as is necessary: Infuse and distil, make it up high proof, and dulcifie with double refin'd loaf Sugar two pound and a half for use.

Another.

Take best Lemon peel bruised eighteen ounces, Orange peel nine ounces, Nutmegs bruised one quarter of a pound, strong proof-spirits three gallons, water two gallons; macerate, distil and dulcifie with double refin'd loaf Sugar two pound, for use, &c.

The former is what is usually sold in *London* for Citron-water; and it must be a nice palate that distinguishes it from the genuine: You ought to keep some of this water undulcified; for most persons of the best judgment desire it so; and for others it may be dulcified (*pro re nata*) with a lump of double refin'd Sugar put into the glass.

Virtues of Citron-water.

The true Citron-water (which I have drawn from the Citron-peel in the West Indies) I found had a more aromack and spicy flavour than any cou'd be drawn from the Lemon peel alone: And the Figs only contribute to make it softer and smother upon the palate. This put me upon an enquiry, whether a succedaneum might not

be found, nearer, and more improv'd to the nature and flavour of the genuine, than what was vulgarly sold: And this form or Recipe with Nutmegs, which here I have given you, I found after many experiments, to come nearest to the true or West India Citron; the Nuts must be bruised, and the peels cut in pieces, and infus'd all night in the rectify'd spirit and liquor, and then drawn off with a gentle fire, which reserve in bottles either plain or dulcified.

This water is a very pleasant cordial dram, of a very aromatick and grateful flavour: It strengthens the stomach, and gives a suitable tensity to the nervous tunics of it, thereby rendering it more able to digest the aliment. And by the addition of the Nutmegs it becomes a good cephalic, and comforts the brain as well as stomach; and that partly by the grateful sensation it imparts to the nervous system, invigorating their tonick structure, and partly also by its warming discussive quality; it dries and clears the brain of superfluous humidities, attenuating and making them fit for glandular secretion, or perspiration.

Plague-water.

Take Rue, Rosemary, Balm, Carduus, Scordium, Marigold-flowers, Dragons, Goats-rue, Mint, each three handfuls, roots of Master-wort, Angelica, Butter-bur, Piony, each six ounces, Scorzonera three ounces, proof-spirits three gallons; macerate, distil, and make it up high proof.

Another.

Take roots of Masterwort, Gentian, Snake-root, each two ounces; green Walnuts bruised
twenty four

twenty four, Venice-Treacle and Mithridate, each one ounce; Camphire two drachms, Rue, Elecampane-root, each an ounce; Horehound two ounces, Saffron a drachm, Proof-spirits three gallons, Water *q. f.* Distil, and sweeten with white Sugar one pound and a half for use. Note, that the Saffron is best added after distillation.

Epidemick, or Plague-water.

Take Dragons, Rosemary, Wormwood, Sage, Scordium, Mugwort, Scabious, Balm, Carduus, Tormentil with roots, Angelica with roots, Marigold-flowers, Centuary, Betony, Pimpinell, Celadine, Rue, Agrimony, each half a pound; Gentian, Zedoary, Liquorise, Elecampane, each four ounces: Bruise and slice the ingredients, and infuse them in three gallons of Molossus-spirits; then add Spring-water two gallons: Distil, and dulcify with fine Sugar one pound, for sale.

Virtues of Plague-water.

I have given you here three prescriptions for compounding Plague-water, of which you may take your choice. They are compounded of noble and generous Alexipharmacks; and are each profitable to be taken as a preservative against all pestilential, malign, or other contagious distempers; and also as an antidote to expel the malignity from the heart, and force it towards the circumference, there to be discharg'd by a gentle Diaphoresis: And this they effect by the subtilty and tenuity of their substance, whereby they divide and attenuate the humours, so as to render them fine enough to pass thro' the cutaneous

neous glands by a sensible perspiration, which appears upon the cuticle in form of dew, or gentle sweat : And to this necessary work we may well suppose the nerves lend their helping hand ; for they being now invigorated by a fresh influx of animal spirits communicated to them by these generous Cordials, or Alexipharmacks, and their waste repair'd by this timely Auxiliary, are enabled more forcibly to contract their fibres, and so to squeeze out of the capillaries those humours which obstructed the perspiration ; or so to divide them by such shocks and impulses of the contracting fibres, that becoming thereby more fluxile they may readily pass out that way which nature endeavours for their excretion ; which commonly terminates the distemper by this critical evacuation.

That Plague-water which I approve best of for this purpose, is the second Recipe made with the Theriacas, Snake-root, Camphire, Saffron, &c. Amongst all the whole tribe of Alexipharmacks no greater antidotes can be found ; for they are allow'd by all the learned Physicians both ancient and modern, to be the principal ingredients for this use. The Walnuts and Rue form'd the basis (or rather made up the most part) of that fam'd antidote, or counter-poison of *Mithridates* King of *Pontus*, which so effectually preserv'd his body (and render'd it proof) against all manner of Poisons. The Camphire Croci and Rad. *Serpentaria* Virg. are of no less efficacy ; for they are generally taken to be the greatest Alexipharmacks in the whole *materia medica* ; for being of wonderful subtil parts, they exceedingly attenuate gross or viscid humours, obstructing the capillaries, and forcing them out by sweat ; and by the same attenuating qualities, have the efficacy or power to keep the rest of the humours or circulating fluids in a due state of fluxility.

Aqua

Aqua mirabilis.

Take Sage, Betony, Balm, Cowslip-flowers, Mint, each a handful and half; Cubebs, Galingal, Ginger, Calamus Aromaticus, each one ounce and half; Nutmegs, Cloves, Cardamums, each half an ounce; Proof-spirits three gallons, Water, *q. s.* Macerate, distil, and dulcify with fine Sugar a pound and half for use.

Another.

Take Celadine half a pound, Nuts, Ginger, each one ounce; Cowslip-flowers half a pound, Cloves one ounce; Penny-royal, Marjoram, each four ounces; Spirits rectify'd three gallons; infuse all night, and distil; which make up high proof, and dulcify with fine Loaf-sugar two pounds for sale or use.

The College has it thus.

Take Cloves, Galingal, Cubebs, Mace, Cardamums, Nuts, Ginger, each half an ounce; Juice of Celadine two pounds, rectify'd Spirits two gallons, Water one gallon; distil, and edulcorate with Loaf-sugar, *q. s. pro usu.*

Another.

Take Cardamums, Cubebs, Nuts, Galingal, each two drachms; Cloves a drachm; white Ginger and Grains, each half an ounce; Caraway-seeds one ounce, Proof-spirits two gallons and a half; Water one gallon and a half; infuse, draw off, and dulcify with fine Sugar two pounds for sale or use.

Virtues

Virtues of Aqua mirabilis.

These are the various Recipes that are now us'd, and there is little difference in their virtues, except what the Penny-royal makes in the one, and the Celadine in another; for the virtues of the Spices are not much different, being all of the warming and aromack species; and upon that account are good stomachick and cephalick ingredients.

This Water warms the stomach, corrects crudities, and flatulencies in the *primæ viæ*, and thereby helps digestion; chears the heart, helps languor and faintings, and performs the office of a generous Cordial to the whole animal œconomy: It is frequently prescrib'd by Physicians in most stomachick and cephalick Julaps; and upon the account of its aromack flavour, is usually the sole spirituous Menstruum in Pearl Cordials; for by its warmth it helps Digestion, stops Vomiting, Hiccough, Gripes in the stomach and bowels; and by the addition of the Celadine is useful in all indispositions of the Eyes, proceeding from weakness, or obstruction of the optick nerves; for it attenuates and discusses gross humours; and by its pungency vellicates the fibres to shake off any pendulous or gross matter which may occasion their obstruction.

But here I would be understood, that when I reckon up the several virtues contain'd in each Cordial-water arising from, and communicated to them, by their proper ingredients, extracted by the spirituous Menstruum, I don't mean, that a liberal use of any of these Waters us'd simply, or by themselves, will really effect a cure in the aforesaid diseases; neither do I believe any one so gross as to expect it; for it is certain that all spirituous liquors produce a Coagulum in the blood, if immoderately taken; suffocate the natural heat, thereby

thereby inducing Dropsies, Weakness of the Nerves, and other cold and humid distempers, as is daily experienc'd in those who have long indulg'd themselves in a too frequent use of them, and evidenc'd by their swell'd legs and trembling hands : Therefore they are to be taken as a Cordial, either simply, or diluted with some proper vehicle ; when, and at such seasons, as the recited diseases call for the use of them ; and then the rehears'd benefits and virtues may be expected from them : For a daily use of any thing, whether medicinal or not, becomes in time so customary to nature, that in case of a distemper, wherein that Medicine, Cordial, &c. might be serviceable, and from which a cure might happily be expected, it will then fail at the greatest need, and no more benefit may be expected from it, than from our daily food in a continual Fever, which rather augments, than abates the fury of the distemper : And of this we see divers examples, as in those who to allay some inveterate pain, or induce sleep when long absent, have begun with a moderate dose of Laudanum, &c. which answering the expectation, and they fearing the sad returns of their hostile guest, when the salutary and pleasing dose had spent its virtue, have been prevail'd with to repeat the same dose again ; but not finding the same benefit as from the former, to mend the matter, have augmented the dose some few drops or grains, and thus by degrees increasing it, have at last arriv'd to such an uncommon pitch of taking Opiats, nature having now made it habitual to them, that one ordinary dose of such persons would be sufficient to kill half a dozen persons unaccustom'd to this medicine. I knew a young Gentlewoman, who to palliate an occult Cancer in her breast, took a large silver spoonful of liquid Laudanum every night,

without

without any visible harm, or stupor arising from it: And this dose would have been sufficient at thirty drops or grains *per* dose (which is too much for the strongest persons, Madness or Delirium excepted) for eight persons; for a large silver spoonful will contain a full half ounce. And I know another at this very moment, who will daily take a scruple of *London* Laudanum at a dose, and even as much of Crude Opium, to abate the excruciating nocturnal pains of the Venereal distemper; and especially of nodes and gummata, wherewith he was much afflicted. And we daily experience the same in Tobacco and Snuff-takers, which has little effect upon them, in comparison with other people. And therefore I must here advise all persons, who at any time would expect benefit from any medicinal composition, not to be too liberal in its use, but to take it moderately, as occasion requires; and then he may expect to reap the benefit of it at a time when most requir'd.

Hungary-water.

Take Proof-spirits three gallons, Rosemary and Lavender-tops, each three handfuls; macerate, and distil according to art.

Another.

Take flowers and tops of Rosemary nine handfuls, Lavender three handfuls, root of Florentine-orrice three ounces, Salt two handfuls, Proof-spirits three gallons, Water *q. s.* distil *s. a.*

Virtues

Virtues of Hungary-water.

This Water was formerly made with only the Flor. Anth. but by the addition of the Laverder the medicine is much the better; and the Orr. Flor. gives a more delicious flavour to it: This spirituous medicament is seldom or never us'd inwardly, but always topically, as in Embrocations, Epithems, Lotions, &c. its chief use is in nervous and cephalick diseases, especially those proceeding from a cold cause, as Epilepsies, Apoplexies, Atrophies, Spasms, and all Paralytick affections; it dries up superfluous humidities (falling upon or lodg'd in any part) by its heat; and is a good discussive in cold gross tumors, for it is highly impregnated with a subtil detergent oil, which incides and attenuates the viscidities, and by its warmth rarefies the same, so as to become fit to be carry'd off either by transpiration, or to be absorb'd, or reassum'd by the reflux blood, thence to be convey'd to some convenient excretory, in order for its secretion. We apply it to the origine of the nerves in convulsive Spasms, and twitchings of the arms, and Paralysis of those parts; and it is rub'd along the Spondils of the neck and back for the same end. It makes a noble cephalick Snuff, if mix'd with Spirit of Lavender; and is of singular use against Megrims, Vertigo, Lethargy, Head-ach, Apoplexy, &c. The said cephalick mixture may be rub'd from the second Vertebra of the neck to the first of the Thorax, and also on the fore-part of the Gula, and about the Clavicles, for loss of speech; for at the said second Vertebra issue out the nerves from the cervical marrow there, which send forth several twigs to the muscles of the Larynx, Gula, neck,

Neck, and parts adjacent; which having form'd two Plexus, from the inferior of which immediately under the Clavicles spring the recurrent nerves, the main organ or instrument that serves for the formation and modulation of the voice, both which nerves run up along the sides of the Trachæa, to which they impart some twigs, and end in the muscles of the Larynx. I have deviated thus far to shew you the origine, course, and insertion of those nerves, which are the chief instrument of voice and speech; which being obstructed, or otherwise preternaturally affected, a defect or loss of speech must consequently follow: And no better external medicine do I know than this composition to rub the describ'd parts with, whereby the said nerves will be invigorated to shake off the viscidities which causes their obstructions; or if occasion'd by too much superfluous humidity, or laxity of the said nerves, this medicament by its warmth, subtilty and pungency, will both attenuate the Lensor, discuss and dry up the humidities (which it effects by its saline particles therewith impregnated) and by its pungency (arising from its hot detergent oil) vellicate, and contract their fibres, so as to recover their natural elasticity, whereby their vibrations being oftener repeated, the nervous fluid will thereby be so attenuated (being also assisted by the subtil parts of the medicine immediately penetrating the same) as to pass freely without obstruction to those parts they are design'd to give sense and motion to; and this in the interim may be assisted with internal cephalicks, as Spirit of Lavender Comp. given in Juleps, or any convenient vehicle. The Eleosacchar. Anth. and Lavendul. are specifics in this case. The use and virtue of Hungary-water may be much augmented and improv'd by an addition of Camphire to it, which by its great
heat,

heat, subtilty and volatility, dries up superfluous moisture, contracts the weaken'd Fibrillæ, attenuates, incides, and discusses viscidities, and disposes the fluids to a brisk motion, from whence comes natural heat, and consequently nourishment to those parts, which before labour'd under a contrary quality.

Lemon or Orange-water.

Take Proof-spirits three gallons, Lemon of Orange-peel one pound, Water one gallon and a half; distil, and dulcify with Sugar one pound and a half, for use or sale.

Virtues of Orange-water.

The virtues of this Water are the same with that which comes under the denomination of Citron-water, which I have under that head enumerated. This Water, if drawn high proof, would be a proper Menstruum to extract stomachick Tinctures and Elixirs with; and is of it self, if sparingly or cordially taken, a good stomachick: Otherwise, all spirituous liquors, if taken to excess, destroy the tone of the stomach, weaken the digestive faculty, and are, as I before observ'd, the cause and essence of innumerable diseases. Excess in any thing produces the same disorders: For we see that if our daily aliment, by which our bodies are nourish'd and preserv'd in the state of health, and is the most benign, amicable, and accustom'd to nature of any thing whatever we receive into the stomach, yet (I say) if common food be immoderately taken, and the stomach be so furcharg'd thereby, that

the concoctive faculty can't break, dissolve, and transmute the same into perfect and laudable Chyle, it passes the Pylorus crude and half digested; and for want of a due ferment enters the Lacteals in that state, where it is either obstructed in the glands of the Mesentery, whence ensues a Cæliaca; or if it passes the same, and ascends the Thoracick duct to the Subclavians, and there be mix'd with the blood, yet for want of a due comminution and exaltation of its spirituous parts, some of those gross particles will obstruct in the capillaries, whereby perspiration will be hinder'd, and the excrementitious particles will be retain'd and remix'd with the blood; which being now heterogeneous to nature, the expulsion of them will by all possible endeavours be attempted: Whence will follow a colluctation, or intestine struggle in the sanguineous mass; and this will be augmented by the Lentor induc'd upon the blood by the crude Chyle, which inviscating the more spirituous parts thereof, by nature volatile, and endeavouring to expand, or free themselves from this oppression, and the avenues of perspiration being stop'd, the innate heat will be concentrated, whereby the extream parts will feel cold, and by forming obstructions in the capillaries, or evanescent arteries, especially in the head, pain and tension will be perceiv'd there. And this is the first stage of an approaching Synoche or putrid Fever, induc'd primarily by gorging, surfeiting, and over-loading the stomach. Another misfortune attends Gluttony, Drunkenness, &c. viz. when the stomach has by these disorders been repleted and stretch'd beyond its natural and healthful dimensions; and being so retain'd for some time, it will, like a blown bladder, (as being also membranous) grow thinner than is requisite, and thereby consequently colder, the concoctive heat

evaporating ; which heat is so necessary to digestion, that without it the same can't be perform'd ; and the fibres of it being stretch'd beyond their natural bounds in length, lose their elastick force or virtue ; so that when the stomach should close its two orifices, and contract it self more closely to embrace the meat in order for concoction, to which position it always accommodates it self in a healthful state, it can't, by reason of the said distention or over-stretching, suit it self to the ingested aliments or contents, but retains its swollen figure ; whence come vapours, crudities, belchings, rumblings in the guts, &c. and the circular fibres of the Pylorus likewise suffering with the longitudinal and transverse fibres of the ventricle, that port will remain open, whereby the meat or aliment will be immediately voided undigested, and also unalter'd, producing a Lientery, and thence an Atrophy or Consumption of the whole body will necessarily ensue. These, and various other diseases arising from surfeiting, and over-repletion, or distention of the ventricle (and this only by that which is most familiar to it, *viz.* our daily food) what an army of diseases may we not expect from an immoderate use of burning hot spirituous liquors, so hostile and repugnant to our nature, when improperly us'd ? Which train of maladies thence ensuing, made a wise Man call them a Stygian liquor ; for he observ'd how unperceiv'd and secretly they made their attacks upon the main guards of life when immoderately and unseasonably us'd : But if, as aforesaid, they be moderately and physically, or cordially taken, they are highly serviceable against the foremention'd diseases, and partake of all the enumerated virtues.

Mint-water.

Take Mint two handfuls, proof-spirits two gallons and a half, Water one gallon; distil, and dulcify with Sugar one pound and a half for use.

Virtues of Mint-water.

This Water wholly partakes of the nature of Mint, and is us'd against vomiting, hiccough, wind in the stomach or bowels, griping of the guts, megrim, head-ach, &c. against all which disorders it has been found to be very available, which it effects by the tenuity and subtilty of its parts, inciding, attenuating, and discussing all viscid humours, and vapours lodg'd in the stomach and gutts, from whence proceed the fore-said diseases; for they all spring from one common cause, viz. either phlegm, wind or vapours, or both, lodg'd in the first passages; which being agitated, cause pricking and griping pains in those parts, with emission of vapours thence to the head; a part which always sympathises with the stomach in its disorders, by the communication of nerves, wherewith the ventricle, especially its upper orifice, is greatly replenish'd.

Ratafia.

Take three gallons of Moloffus-Brandy, Nuts two ounces and a half, bitter Almonds one pound and a half; bruise them, and infuse them in the Brandy, adding Ambergrease three grains mix'd with fine Lisbon Sugar three pounds; infuse all for seven or eight days space, and then strain off for use.

Virtues

Virtues of Ratafia.

This water is seldom or never prescrib'd in physick; it is of a carminative and deterfive quality, which it receives from the Nuts and Almonds; and by the said opening and cleansing quality, may prove a good diuretick; for the bitter Almonds abound with an abstersive Oyl; which as it suffers or undergoes no torture by fire, retains its unctuous and softening quality too. And in this view we have a most noble diuretick of it, answering all the intentions that can be required of a medicament, coming under that appellation: For by its oleaginous quality, the fibres that compose the urinary glandules and canals are lubricated, soften'd, and relaxed; and by their penetrating and deterfive virtue, which certainly they receive from some saline particles wrapped up in, or as it were lying dissolved in the Oyl, they scour off such viscous humours or calculous concretions, as may obstruct the said glandules and hinder the free emission of the urine, till opened and cleansed by medicaments of this nature. The Nuts in this composition look as if designedly added for this use; for by their attenuating quality they rarifie and dilute gross viscid humours, and thereby render them thinner and consequently easier for the opening and deterging particles of the Almonds to incide, dislodge, and so make them pass off by urine. By the same qualities this water may be useful to open obstructions in several other viscera, as the liver, spleen, mesentery, womb, &c. and may answer the same intentions there, as well as in the former: And in the Pulmonick cases too, it may have the same effects, and we may suppose much stronger too, for it immediately arrives at that *viscus* after its commixtion with the blood, and having as yet suffered little

or no depuration, or secretion, of its saline detensive particles, must therefore in a special manner exert its virtue there, in forcing open all obstructions that may impede the blood's course or motion, thereby cleansing the lungs of those infarctions, which might occasion coughs, wheezings, difficult breathing, &c.

Surfeit-water.

Take Centuary, Marigold-flowers, Mint, Rosemary, Mugwort, Scordium, Rue, Carduus, Balm, Dragon's, St. John's wort, each two handfuls; roots of Angelica, Butter-bur, Piony, Scorzoneria, each seven ounces; Calamus Aromaticus, Galingal, Angelica-seeds, Caraways each ten drachms; Ginger six drachms; red Poppy flowers three handfuls; proof-spirits three gallons; water one gallon and a half; macerate distil and dulcify with fine Sugar, one pound and a half for use.

Virtues of white Surfeit-water.

This water is compounded of cephalick, neurotick, hysterick, alexipharmick, carminative and stomachick ingredients, whose virtues being conjoyn'd and designed to strengthen the most principal organs and viscera, must needs be very effectual against crampula's, indigestions, crudities and rawness at Stomach, vomiting, and other symptomes thence arising. It is used succesfully against cholicks, gripings in the stomach and bowels, flatulencies and vapours, all which it discusses by its carminative virtue; it attenuates the humours and helps perspiration, and is therefore good in all epidemical and contagious distempers. It resists putrefaction and expels the malignity from the center to the circumference, which it discharges by a gentle dew upon the surface of the cuticle, and this it effects,

effects by the efficacy of the alexipharmick ingredients, wherewith this compound water is well stored. I have put into the prescription Flo. Papav. Erratic. in lieu of the red poppy seed, which is both cheaper and easier to procure; (especially at the season of the year, which this water should be made in,) and in my opinion without any detriment to the composition; the virtues whereof I shall give you, as soon as I have inserted the following Recipe of Surfeit-water made by infusion.

Take best Brandy a gallon, red Poppies two pecks, let them stand in the sun, in a wide mouth'd jar, close covered for two or three days, till the tincture of the flowers be wholly extracted: Then strain out the liquor from the flowers, by a strong expression; adding to the tincture Caraway, and Coriander-seeds, Liquorise sliced, of each an ounce; Cardamums, Cubebs, of each three drachms; Raisins stoned half a pound; Cinnamon half an ounce; Nutmegs, Mace, each two drachms, Cloves ten, Ginger two rances, Juniper berries two drachms, two Lemons sliced; infuse three or four days, adding eight Figs sliced, white Sugar, one pound and a half, Rose-water a quart, let them stand for a day or two longer in infusion, often shaken in the mean while, and then strain and let it stand to subside for use.

Virtues of Surfeit-water.

This water is no whit inferior to the former, but rather superior; for it retains the whole carminative and alexipharmick virtues of the other, and is no less powerful to drive out and expel the intestine enemy, than that which is loaded with alexipharmicks. And lest any should doubt of this matter, I will endeavour to shew after what manner it is perform'd. And omitting the carmi-

natives, which I could bring in as useful in this case, I will begin with the Poppies, which are known to partake of a narcotick and anodyne quality, and as such induce rest and sleep, at which time we know perspiration to be most free, *Sanctorius*, an oracle in these matters, has in his statick experiments told us, that tossing and moving the body in bed hinders perspiration, and that we are to put a restraint upon our selves while there, and though we can't presently sleep, yet are we to lie still and quiet tho' never so contrary to our inclination, for thereby concoction of the perspirable matter, and perspiration it self will be sooner and fuller perfected. Now as the Poppy-flowers, by their anodyne quality allay pain, and induce pleasant and quiet sleep, the rehearsed natural and beneficial evacuation will thereby be promoted more fully and effectually (if taken at or about bed time, or when in bed) than by the strongest alexipharmick in nature, wherein no opiate enters the composition; for they by their great heat which they communicate to the blood and spirits, do thereby much augment the blood's velocity, and raise a febrile heat therein, which if the subtilty of their particles be not capable and sufficient of themselves to open the obstructed cutaneous glands, as we see very often fails, when given in incipient fevers (both intermitten and continual) and thereby put off the recrements of the blood and febrile *fomes* together, they may be said to be the efficient cause of that distemper, for which they were designed a cure. But this water made with the Poppy flowers is guarded against this perilous inconveniency and danger, by the anodyne quality of the said flowers, which rather repress than excite any tumultuous motion in the sanguineous mass; whereby that fluid moving in a regular, fe-

date

date course or motion, will have the more leisure to put off its excrementitious parts by the glands of the skin, than when in a preternatural hurry or rapid course. And this salutary evacuation, we may suppose to be promoted and assisted by the acid particles of the Lemon, which vellicating the fibres, causes them to contract and squeeze out of the Capillaries whatever lodg'd there, and hinder'd perspiration; thereby opening the pores or passages of their glandules, and making free egress for what is designed to pass off that way. And this is the Reason why acids are usually prescribed, and rank'd amongst the tribe of alexipharmicks. This water is also accounted good to stop fluxes of all sorts; which it effects by its warming, carminative, and discussive quality, imparted thereto by the spices and seeds; whereby superfluous humidities are absorb'd and discuss'd, which were the primary cause of weakness and continual bearing down of those parts, but being remov'd, the parts recover their natural tone, to which the Cinnamon by its roughness and astringency contributes not a little; and by the said virtues of the warm spices, takes away gripings and tortions in those parts, the lenient and softening qualities of the Raisins and Liquorice much conducing thereto. Though I have here attributed the efficacy of this water, in curing fluxes of the bowels, &c. to the warming discussive qualities of the spices, &c. yet do I believe the Poppies to be the chief instrument, and that by their anodyne quality, whereby a Diaphoresis is promoted, and the load of Serum cast off that way, which afore went off probably by other discharges. And the truth of this is confirm'd by daily experience, which teaches us the salutary use of Diaphoreticks, in Diarrhœa's, &c. This water strengthens the stomach, and helps the concoctive faculty thereof,

thereof, thereby preventing crudities and indigestions, the origine of crapula's or surfeits, from whence the said water took its denomination.

Dr. Stephens's water.

Take Thyme, mother of Thyme, Sage, Penny-royal, Pellitory of the wall, Rosemary, red Roses, Chamomile-flowers, Origanum, Lavender, Mint, each a handful and a half: Ginger, Galingal, Cinnamon, Nuts, Aniseeds, Caraways, each six drachms; proof-spirits three gallons; water *q. s.* macerate, distil, and dulcifie with white Sugar one pound three quarters, for use; adding of leaf-gold six leaves, mix 'em well in the goods *s. a.*

Virtues of Dr. Stephens's water

This water is much of the same nature and use with *aq. mirab.* wholly consisting of carminative and cephalick ingredients. It is a good cordial, and may be used as such simply, or go in composition, in carminative, anticholick, cephalick, and hysterick Juleps, &c. For it discusses wind and vapours, lodg'd either in the first passage, or included between their tunicks, or in the interstices of the muscles; and that either primarily and simply by its discussive and carminative virtue, which it has an immediate effect upon in the *prima via*, by attenuating viscidities, and rarifying and discussing those vapours therein included: Or secondarily by impregnating and communicating the said qualities to the sanguineous fluids, which thereby being conveyed and carried along with the blood, and distributed by the arterial capillaries amongst those muscular or membranous parts, must

must necessarily rarifie and discuss those vapours pent up therein, and throw them off by the secretory ducts. The nerves also may contribute to this work; for by the grateful Effluvia arising from those aromatics they are immediately affected therewith, and an elasticity or springiness is added to their fibres; and this may be partly assisted by the pungency of the salts which arise with the Oyl in distillation, from several of the ingredients, which thereby may vellicate the nervous *fibrillæ*, and so cause their vibrations to be more frequent and strong; and partly by a fresh influx of animal spirits, which those sensitive organs receive from their most volatil and subtil parts. The nervous system is thereby invigorated and enabled more forcibly to agitate and throw off the contained wind, and so help forward its utter expulsion. By the same reasons may we account for and know the method which nature takes in removing obstructions of the nerves, and also those of the cutaneous glands; which here it wou'd be needless to lay down, as requiring more time than I am willing to spend upon this subject, as designing shortly to treat more amply of nervous diseases, their cause and cure, in a work of another nature, to which I refer the reader.

Royal Usquebaugh.

Take Mace, Cloves, Cubebs, of each three drachms and a half; Nuts ten drachms; Cinnamon, Coriander-seeds, Ginger, of each six drachms; proof-spirits thee gallons: Infuse all night, and distil; hanging at the end of your worm English Saffron (dissevered and tyed in a rag) ten drachms, (for the goods to run through, thereby to extract all its tincture:) Then make ready the following

following ingredients, *viz.* Raisins stoned one pound two ounces, dates sliced twelve ounces, liquorice nine ounces, spring water six pints; let them macerate in a warm oven or upon hot ashes, till the whole virtue be extracted from them; then strain 'em, and add fine Lisbon Sugar two pound and a half, which when dissolved therein, and perfectly cold, put to your distill'd goods, and set them by in an open headed vessel, with a cock in it, to become fine and fit for sale or use.

Usquebaugh.

Take Nutmegs, Cloves, Cinnamon, of each half an ounce; Aniseeds, Caraways, Coriander, of each an ounce; Liquorice sliced two ounces, proof-spirits three gallons, water, *q. s.* Macerate and distil, hanging at the end of the worm Saffron tee'd half an ounce; which frequently express or squeeze out, 'till all its tincture be emitted into the distill'd goods, which make up and dulcifie with fine Sugar two pound for use, &c.

Royal Usquebaugh by digestion.

Take Raisins stoned two pound, Figs sliced half a pound, Cinnamon two ounces and a half, Nuts one ounce, Cloves half an ounce, Mace half an ounce, Liquorice three ounces, Saffron half an ounce, bruise the Spices, slice the Liquorice, &c. and pull the Saffron in pieces, and infuse them all in a gallon of the best Brandy for seven or eight days, 'till the whole virtue be extracted from them; then filter them, putting thereto a quart of Canary wine, and half a drachm of essence of Ambergrease,

bergrease, and twelve leaves of gold broken in pieces, which reserve for use.

Virtues of Usquebaugh.

These waters bear an Irish denomination, and are excellent stomachick cordial liquors, and upon the account of the balsamick and healing quality communicated to the *menstruum*, by the Raisins, Dates, Figs, Liquorice, &c. become a good pectoral and restorative cordial: Yet as they are of a very mucilaginous and adhesive substance, if not attenuated and kept fluid by the volatil parts of the warm spices, might perhaps be subject to impress too great a lentor upon the chyle, and adhere in some part of the galaxia, and so dam up and obstruct the small passages or glandulous pores of the mesentery; or if admitted into the blood in that clammy substance, might occasion the same damage there, in some of the arterial capillaries, or their glandules. But this inconvenience is well guarded against, as I above noted; for they undergoing a twofold digestion together, as first in the composition of the cordial liquor, and then afterwards, when received into the ventricle, and there so comminuted and mixed as to become one homogeneous substance, neither too gross and languid, nor too aerial and volatil, the one serving as a spur, the other as a bridle to each other. And in this state they pass along the milky path, till brought into the sanguineous mass, where upon their arrival at the heart, they suffer another comminution or subdivision of their particles; for there, and perhaps also partly in the lungs, by the admixtion of the sulphureous particles of the air, they may be said to undergo their last concoction for the service of the whole

fabrick. For in the heart and arterial canals, the blood is subtiliz'd, and here the spirituous parts begin to separate and take leave of the groffer and more ponderous, as designing to make their exit as soon as they arrive at their proper port. But this being done by a sort of violence or collocation, can't be perform'd all at once; for the groffer bodies endeavouring to restrain or hinder the evolution of the more volatil particles (their old associates) repress their immediate flight, till after repeated vibrations of the arteries, they become more and more divided by the rapid motion of the blood, and consequently more attenuated by the intense heat thereof, are at last forc'd to disjoyn (tho' gradually as afore noted:) And now the groffer particles reassuming their former adhesive and tenacious nature, do readily come into contact, unite and stick in any interstice or cavity made by the attrition and abrasion of the circulating fluid; and thus do they repair the wastes and decays of nature, and may profitably be given in all colliquations or wastings of the solid parts (where a fever, as hectic, &c. is absent) especially if proceeding from a defect or decay of natural heat; and is of great service to old people, where no fever is to be feared, and the lamp of life or *ingenitus ignis*, call'd by some of the antients the *Vestal flame* (as is elegantly describ'd by Dr. Charlton in his *Oeconomia animalis*) has almost consum'd its *pabulum*, and begins to wax faint and low: There nature requires more generous cordials, which may more safely be used than in younger persons, whose blood is more subject to be inflam'd upon very slight occasions. This water upon the account of the Saffron, where-with it is pretty highly impregnated, as containing near five grains in three ounces of the liquid *menstruum*, must needs be a pretty good alexipharmick

pharmick too; and may if cautiously and wisely
 used assist and promote the expulsions of the
 Small Pox, Measles, and other cutaneous erupti-
 ons, where a spur to nature is required: And in
 malign and pestilential Fevers too, its use is of
 good service in expelling and driving out the mor-
 bifick matter by the cutaneous pores, for it ef-
 fectually promotes a diaphoresis: And tho' the
 Saffron may be looked upon proportionably to
 add to, and augment the heat of this cordial
 medicine, yet is it not to be feared upon that head,
 but may rather be used in larger quantity; for as
 it powerfully opens the pores (whereby we may
 judge of a deterfive quality lodg'd in it) and there-
 by removes obstructions and causes a plentiful per-
 spiration of both kinds, (*viz.* sensible and insen-
 sible) it leaves free egress for the hot spirituous
 particles of the *menstruum* to exhale, and thereby
 rather cools and extinguishes, than excites or
 induces any preternatural or febrile heat upon
 the body, as having by the foresaid critical dis-
 charge spent the *fomes* or *pabulum* thereof. And
 this is no fictitious hypothesis, but grounded up-
 on true reason, confirmed by daily experience;
 for don't we see that Camphire (which tho' ta-
 ken, by some persons to be cold in quality, yet
 the inflammability and volatility of its substance or
 constituent particles demonstrates to be hot, and
 that in a high degree) effectually abates and takes
 off all inflammations, and that only by the sub-
 tility of its parts, which opens the pores, and
 having by the said quality attenuated the hu-
 mours that obstructed the passages, makes them
 thereby fit to go off by perspiration. And by
 the said quality and causes, we find spirit of wine
 to be the most effectual remedy against ambustion.
 And if the said qualities be allow'd, we may sup-
 pose it also available to cleanse any of the *viscera*,
 wherever

wherever obstructed, and by cleansing and opening the biliary pores and canal, may be useful in the Jaundice, Cachexy's, &c. and in some uterine cases too it mayn't perhaps be unsuccessfully made use off.

Wormwood-water.

Take dry'd Wormwood one pound, Caraway-seeds bruised four ounces, proof-spirits three gallons, infuse, distil and dulcifie with Sugar one pound and a half, for use.

Virtues of Wormwood-water.

Wormwood-water is deservedly in great use, and esteem; for it is a noble stomachick, and the best of all distill'd waters (Gentian excepted) of that class: It is frequently prescribed in stomachick and chalybiat tinctures and infusions. An excellent stomachick and anticolic tincture might be drawn from Spirit. Absinth, rad. Zedoar. Cort. aurantior. Gent. Centuar. sem. Cardamom. &c. and is much more proper for drawing those tinctures and elixirs with, than spirit of Wine, provided it were no lower drawn than that spirit. Dr. Bates has in his Pharmacopœia, given us the Recipe of a compound Wormwood-water, which for the excellency thereof, I have here transcrib'd from him.

Aq. absinth comp. Bateana.

℞ Cort. extern. Limon recent ℥i℥ aurant. ℥i sumat. abs. sicc. Cort. winteran. ana ℥ss Flo. Cham. ℥iv Sem. Cardamom. Cariophyl. Cubeb. Junc. odorat. each ℥j Cinnam. N. M. Sem. Carui ana ℥ii sp. rectif. ℥xij aq. absinth. simpl. Cong. 4℔ diger. per trium dierum spatium, postea distil. s. a.

The

The composition of this Water shews its virtues and use to which it was design'd; for the basis of it wholly consists of stomachick, carminative, and anti-cholick ingredients: And in my opinion, nothing can be more suitably adapted to this purpose; only I think the quantity of Wormwood (as this Water takes its appellation from it) is too little, and the Orange peel might have been substituted instead of the Lemon, if its quantity had been increas'd without any detriment to the medicine; and if Zedoary and Ginger had been added, it would have been yet more powerful to all the design'd intentions, which is particularly to warm the stomach, incide, attenuate, and discuss crude viscid phlegm, and vapours the product of it. It brings over in distillation a great quantity of its salt, which with its oyl lyes envelop'd in the spirit; its pungency upon the tongue does plainly discover it, which acting upon the membranous coats of the stomach, by vellicating the fibres thereof, gives a suitable tensity thereto; and if any visciduity be therein lodg'd, or adherent thereto, it abrades and scours off the same, which, if wholly excrementitious, is extracted into the intestinal duct, there to be secreted with the fæces. The cavity of the ventricle being thus purg'd or cleans'd, and its fibres being invigorated and strengthen'd by the grateful sensation of the warm stomachick spices, and partly also by that slight vellication or pleasing pungency which the fibres thereof might receive from the said salts, thereby giving them a suitable tensity, whereby its concave or inner part becoming more corrugated, renders this membranous bowel more able to retain and accommodate itself to the ingested aliment, in order for laudable digestion. And this it effects, by pursing up itself, and more streightly closing

its two orifices, whereby it becomes thicker and stronger, and consequently more able to break, digest, and transmute the aliment into good and perfect chyle, fit for its entrance into the lacteal vessels rank'd along the sides of the first or small intestines: Thus by inciding and removing phlegm (the parent of wind and vapours) out of the first passages, and by cleansing the stomach, and giving a due elasticity or springiness to its fibres, are aromatick bitters accounted true stomachicks, and are a succedaneum to natural bile or choler; which, like these, deterges and scours off crude phlegm, and always causes a sense of hunger whenever this useful humour is contain'd, and has the predominance, in the ventricle. All bitters resist putrefaction, the Nidus or common Matrix of worms, Gripes, putrid Fevers, Cachochymias, &c. with innumerable other Maladies too tedious here to recite.

Juniper-water.

Take best Juniper berries twelve ounces, proof spirits three gallons, Water *q. s.* Distil, and dulcify with Sugar one pound, for sale or use.

Virtues of Juniper-water.

This Water is more in esteem (as has been observ'd in the former part of this work) especially amongst the populace, than all the whole tribe of distill'd Waters put together. It is a good carminative Water, and preferable to Aniseeds upon the account of its taste, as being much gratefuller and pleasanter to the palate; (especially if it be not reduc'd below proof, for
then

then it becomes foul, phlegmatick, and ill-tasted, (as indeed most distill'd goods lower'd below proof frequently are) and in virtues it equals, if not exceeds it; for it partakes of all the carminative quality of the other, and is as effectual to discufs wind and vapours, either in the stomach or bowels. It is the common Anticholick Water amongst country people, and is very effectual for that purpose, as is frequently experienc'd; for the Berries abound with a very detergent salt, which rises in distillation with the oyl and spirit, which powerfully incides and scours off phlegm, &c. adhering to the inner tunick of the intestines; and by its warming carminative virtue attenuates the same, and discusses any collection of vapours therein, or elsewhere inclos'd: And by the said qualities this Water becomes an excellent diuretick, detarging and cleansing the reins and urinary passages, whereby it powerfully provokes urine, and causes a free discharge of that excrementitious fluid. The *Dutch* have this Water in great esteem for the said diuretick quality, which they frequently experience as often as they drink their impure, feculent, and grooty Malt liquor (no more comparable to our clean *English* Ale or Beer, than Water is to Wine) they presently fall into an Ischuria, or total suppression of urine, which I conceive may be occasion'd by the grossness of that liquor. And as those people are commonly great drinkers, and great drinkers commonly are (or at least should be) great pissers; and it is frequently observ'd, that a great portion of our drink goes immediately off by urine, we may not improperly conjecture, that the feculencies, or grosser parts of that liquor is convey'd along with the blood to the kidneys, where falling in with the Serum into the secretory glands of that

part, does so obstruct and fill up the same, that no more Serum can there be put off from the blood; and consequently then no urine descend thro' the ureters into the bladder: And this I take to be the occasion of their suppression; which as soon as those people labour under, and are sensible of, they fly (*tanquam ad asylum*) to the use of this distill'd Water; which they have so often experimented to give them ease and benefit; for being taken in a pretty moderate dose it soon removes the obstruction by its detergent quality, opening and cleansing the urinary pores and glandules, whereby they receive that common benefit of nature (*viz.* a free discharge and open passage for the urinary fluid) which their gross Malt liquor had stopp'd up.

And by the said quality, Geneva may be of service in the Jaundies, by opening the obstructions in the biliary pores and canals; and with it a very good Icteric Tincture might be made with proper Anti-icteric ingredients, as Croci, Curcum, Rubi Tinctor. &c. Dr. Bate commends the Spirit of Juniper, to be a very powerful medicine in curing and removing barrenness; which I conceive must be, by discussing and drying up the superfluous humidities of the matrix: And further he tells us, it provokes the Catamenia or Menses, which is effected by the efficacy of its detergent salts; which striking against, and forcing open the mouths or extremities of the uterine vessels, it absterges or wears away the obstructing viscidities, whereby a free passage is granted for those periodick evacuations.

Cardemum.

Cardemum.

Take Pimento, Caraway and Coriander seeds, Lemon-peel, each four ounces; proof-spirits three gallons, Water *q. f.* Distil, and dulcify with Sugar one pound and a half, for sale or use.

Virtues of Cardemum.

This Water is never prescrib'd in medicine that I know of; tho' tis a good stomachick, carminative, and anticholick liquor: And were it drawn as high proof as the Cordial waters of the shops, it would not be much inferior in flavour and virtue to Aqua mirabilis. It is a cheap, tho' good composition, and may very well be substituted in lieu of Aniseed water, whose abominable Empyreuma and disagreeable gust renders it unfit either for dram or medicine. This Water may be us'd in all cases where any other carminative or stomachick Cordial water may be of service, especially in cold and humid distemperatures; for by its warming, attenuating, and discussing faculty it dries up superfluous moisture, discusses wind and vapours, and makes way for their transpiration; it comforts the heart by the grateful sensation which its fibres receive from the aromattick spices of this Cordial, whereby they being invigorated, the contractions of that *viscus* will be more frequently and forcibly repeated, and consequently a greater Impetus given to the blood's circulatory motion. And thus, tho' spirituous liquors are said to induce a Coagulum upon the blood, and that from the authority of a great Man (Dr. Pitcairn I

mean) who in his experiments made with the Juices of several Vegetables, &c. upon blood, found that Spirit of Wine produc'd a considerable Coagulum therein; and that it ran into Grumes, with a large separation of Serum; yet this was after it was drawn out of the body, and expos'd to the air, and therefore might have a different effect, from what it would have produc'd in the body of a living animal. And this I am induc'd to believe for the foresaid reasons; for daily experience tells us, that a moderate dose of any spirituous liquor does much increase the blood's velocity (as the more frequent vibrations or smart strokes of the artery and augmented heat of our bodies does plainly evidence;) which, if granted, the cohesion or gross texture of the blood must necessarily be divided and attenuated, and kept more fluxile in this state of rapidity, as being more broken, divided, and attenuated by the frequent Systoles of the heart, and its productions (the Aorta and its subdivided canals I mean.) And this is farther prov'd by the intense heat we perceive and feel in our bodies when afflicted with a febrile Paroxysm: The cold fit (its first insult) being past, and the Lentor partly divided by the said frequent contractions of the heart, and the arteries following its motion, a rapid circulatory motion presently succeeds, with a violent burning heat accompanying and arising from it; and in this state the blood must certainly be allow'd to be more fluxile than in a quiescent or tranquil state, otherwise that great heat cou'd not so immediately be dispers'd and diffus'd over the whole body, but only to some certain parts of it where the larger vessels terminated, for in the Capillaries it would obstruct, and cause pain and tension, as is seen in Rheumatisms; and the extream parts would,

would, as being defrauded of their nourishment, feel cold; but in continual Fevers, or any increas'd motion of the blood, no such symptom happens. Therefore we are induc'd to think that they don't cause so great a Coagulum in the blood, as they are generally thought to do, especially if moderately and cordially taken; but if otherwise, 'tis indisputable they do. The spirituous parts passing off, and the grumous becoming adust by the force or violence of preternatural heat, occasion'd by the immoderate use of hot spirituous liquors, will necessarily run into grumes or clots, with a large separation of its Serum; which I take to be the primary cause of a Dropsy in great drinkers of spirituous liquors by which repletion the *Lar familiaris*, or ἐμφύτον πῦρ of *Hippocrates*, becomes suffocated and extinguish'd; and the superfluous ferrous parts of the blood not passing timely off probably causes a rupture of the Lymphaticks, which daily augmenting lays the foundation of that disease. Thus may we account for that cold and chill habit of body, and hydropical swellings that such persons are subject to. But as this business ought to be treated of in another manner, I shall lay it aside 'till another opportunity, as designing only here to shew the dangerous use of hot burning liquors in young and cholerick persons, whose blood is subject to be inflam'd; but in cold and humid constitutions, especially if inclining to old age, a more liberal use may then be safely allow'd.

Nutmeg-water.

Take Nutmegs bruis'd twelve ounces, proof-spirits three gallons, Water one gallon and a half;

half; infuse, distil, and dulcify with fine Sugar two pounds for use.

Another.

Take Nuts bruis'd half a pound, Caraway seeds or Orange peel an ounce, proof-spirits three gallons, Water *q. s.* Distil, and sweeten with Loaf Sugar two pounds.

Virtues of Nutmeg-water.

This Water is seldom made, yet for its virtues deserves to stand in the first class of all stomachick and cephalick Cordial waters, both upon the account of its agreeable flavour, and its medicinal virtues; for in the whole *materia medica* there is not one compound water found, that is more agreeable to the palate, more comfortable to the stomach, and more grateful to the nerves than this Cordial is; and may profitably be us'd in all cephalick and nervous cases, especially those proceeding from a cold cause; for as it abounds with a very warming and subtil oil, it powerfully discusses wind and vapours from the stomach, bowels and head, thereby curing pains and tortions in those parts. It dries up and discusses the superfluous humidities of the brain, and is therefore serviceable in Catarrhs, and other serous defluxions; it helps and strengthens the memory and eye-sight by the said qualities (especially if affected with too much moisture): It strengthens the stomach, and other membranous parts, by repairing the relax'd tone of their fibres, giving a suitable tensity thereto; and therefore may be found serviceable in most of their disorders; which here for brevity's sake I shall omit 'till a farther opportunity.

Rosa

Rosa Solis.

Take Rosa Solis pick'd clean one pound and a quarter; Cinamon, Cloves, Nutmegs, each an ounce; Marigold-flowers a quarter of a pound, Caraway-seeds three ounces, proof-spirits three gallons, Water two gallons; draw off your proof-spirits from the Still, and infuse in a quart of liquor, Liquorice slic'd four ounces, Raisins ston'd one pound, red Sanders four ounces; infuse upon hot ashes to a due extraction of their virtue; strain, and dissolve therein white Sugar one pound and a half, which when cold mix with the proof goods for use.

Rosa Solis by digestion.

Take Rosa Solis clean pick'd four handfuls, Nutmegs, Caraway and Coriander seeds, Mace, Cloves, Cinnamon, each half an ounce; Ginger, Cardemums, Zedoary, Calamus Aromaticus, each a drachm and a half; Cubebs, yellow Sanders, each half a drachm; red Sanders an ounce, Liquorice two ounces, red Rose-leaves dry'd a handful, best Brandy a gallon; infuse for some days, and then strain off the clear liquor; in which dissolve white Sugar twelve ounces.

Another.

Take Rosa Solis cleans'd four handfuls; Cinamon, Nutmegs, Caraway and Coriander seed, each one ounce; Cloves, Mace, Ginger, each three drachms; Cardemums, Cubebs, Zedoary, Calamus Aromaticus, each a drachm, red Roses dry'd an ounce, Liquorice two ounces, Raisins ston'd

ston'd half a pound, Cochineal, Saffron, each one drachm, best Brandy one gallon; infuse for eight days, and strain, to which add Loaf Sugar twelve ounces.

Virtues of Rosa Solis.

These Waters made by infusion of the herb are hotter in quality than that which comes off by distillation, where most of its hot, fiery, and almost caustick fixed Salt does not ascend in distillation, but remains with the Magma in the Still; yet are they both without danger. Dr. *Bates* in his Dispensatory, and the College in theirs, both give us a Recipe thereof made by infusion, not much different from each other, or from those I have here inserted. The virtues rehearsed by the said Author are these; it is good against Phthysicks, or consumption of the Lungs, a Tabes, or pining, &c. It comforts the heart, liver, and ventricle, eases the pain of the head, and is a preservative from the Plague. Thus Dr. *Bates*. All which virtues may be ascrib'd to its heating and drying quality, which attenuates and discusses the crude *Pituita* heap'd up in the lungs, and dries up, or absorbs the remaining particles thereof: Its detergent quality absterges, or scours off the purulent matter, and cleanses the little abscesses, thereby disposing them for the reception of the nutritious balsamick particles, to fall in with, adhere to, and fill up those eroded cavities, and also dries up the Catarrh, the origine of this distemper; it eases the pain of the head, by attenuating and discussing vapours there, opening by its penetrating and deterfive quality the glandular pores of the capillary arteries, whereby they may exhale or perspire; or by a more
imme-

immediate way, *viz.* thro' the pores or Perspiracula of the Cranium, which Dr. *Havers* has observ'd in the upper part of the *Os frontis*, and about the Fontanella or junctures of the coronal and sagittal sutures, thro' which the offensive vapours which arise and gather within the Cranium do perspire; and not only the tenuious vapours, but also the more gross and morbid particles may be evacuated out of the cavity of the skull that way; and farther, by its immediate effect upon the nervous membrane of the stomach, by invigorating and corrugating its fibres, as aforeshewn, the concoctive faculty thereof is assisted and promoted, whereby crudities are remov'd, and the cause of indigestions, vapours, &c. which may ascend to, and trouble the head, or other parts, is taken away; and by its said effect upon the fibres of the heart and other viscera, all languor or faintness is remov'd by the grateful sensation which this Cordial imparts to them; and by a new supply of the nervous fluid they are invigorated and strengthen'd to shake off whatever is heterogeneous or offensive to them. And thus may this Cordial be said to comfort the principal viscera: And I have here endeavour'd to explain the method or manner how it is perform'd.

London Plague-water, another sort.

Take green Walnuts one pound and a half, Angelica-root half a pound, Angelica-leaves, Rue, Sage, Scordium, each three handfuls, Nuts, long Pepper, Ginger, Camphire, Gentian, each an ounce and a half, Snake-root, Contrayerva, Elecampane, Zedoary, Vipers flesh, each four ounces; Venice Treacle and Mithridate, each four ounces,
8
white

white wine Vinegar two pounds, proof-spirits two gallons; macerate, and distil, *f. a.*

Virtues of London Plague-water.

I could not here omit giving you the prescription of this most excellent composition; for certainly nothing can be more regularly and judiciously compos'd, or more effectually levell'd against the pestilential Miasmata, than this great Alexipharmick is. The virtues I have not time now to enumerate; but it partakes of the same qualities (tho' far superior in strength and goodness) with the afore-recited Plague waters.

Spirit of Alkermes.

Take Orange-peel, Cinnamon, each four ounces, Lemon-peel, Nuts, Rosemary-flowers, bitter Almonds, each two ounces, proof-spirits one gallon and a half, Water one gallon; macerate, and distil, to which add Juice of Chermes one pound, double refin'd Sugar one pound, Ambergrease (rub'd and mix'd in the said Sugar) a scruple: Digest for some days, and filter, adding Leaf-Gold half an ounce.

Another by infusion.

Take Cinnamon and Citron water, each one pound, Juice of Chermes three ounces, double refin'd Loaf Sugar a quarter of a pound: Digest, and filter, adding Leaf Gold N^o. eight, Essence of Ambergrease half a drachm; mix.

Or,

Take red Surfeit water one pound, Cinnamon and Citron water, each half a pound, Confection of Alkermes three ounces: Digest, and filter, adding Leaf-Gold N^o. eight. *misce.*

Virtues

Virtues of Spirit of Alkermes.

As this Water is a great Cordial, so it bears a great price, which is much augmented by the Gold and Ambergrease which enters the composition; it is good in nervous cases; and by its grateful effluvia takes off fainting, swooning, palpitation and tremor of the heart, weakness and numbness of the extreame parts, Spasms, Paralysees, and other nervous disorders.

Antiscorbutick-water.

Take Garden Scurvy-grass twelve handfuls, Water-Cresses, Brook-lime, each two handfuls, Lemons slic'd six, Horse-radish root two pounds, fresh Briony-root four pounds, Aaron-root two pounds, Mustard seed six ounces, Nutmegs one ounce: Digest in two gallons of proof-spirits, adding Water *q. f.* and draw off gently the proof-spirit *f. a.*

Virtues of Antiscorbutick-water.

This Water is much the same with that excellent Antiscorbutick Water of the shops call'd *Aqua Raphani comp.* save only that here we have *Sem. Sinapi* in lieu of the *Cortex Winteranæ*, with some other small variations not material. It is compos'd of exceeding subtil and volatile ingredients, whose particles when actuated by the heat and impulse of the arterial fluid, are render'd capable of inciding all viscidities, which may infarctate or obstruct their capillaries, whereby perspi-

perspiration being impeded, the perspirable matter becomes sharp and acrimonious, eroding the capillaries and their glandules, from whence proceed those cutaneous eruptions and erratick pains which form those anxious symptoms we call scorbutick. The *Sem. Sinapi* in the composition makes it serviceable in paralytick and hydropick cases too, by opening and cleansing the mouths and passages of the obstructed canals and Viscera, and also by giving a greater fluidity to their contents; the Stimulus, which their component fibres suffer, by the pungency or vellication of the volatil salts wherewith this medicinal composition is highly loaded or impregnated, not a little contributing thereto. Thus it becomes serviceable in a Dropsy, by opening the urinary pores and passages, for the stagnating humour that way to pass off; and farther, by opening the mouths of the Lymphaticks, and giving a greater fluidity to the Lympha, it may pass on freely without stagnating or bursting its minute canals, which *Etmuller* would have to be the origine of this distemper; or by opening the serous glands and reducing vessels, a free discharge may thereby be given, which being before obstructed, and the humour stagnating in the said vessels, can neither be exhal'd nor resorb'd, but breaking the same, says *Boerhaave*, pours out that humour between the membranes, and this produces a Dropsy. The nerves receive the like benefit by this Water, when they require attenuators, to incide, discuss and rarify viscosities, and a Stimulus to their fibres, to shake off the adhering Lentor.



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